THE ROAD TO

MARVEL STUDIOS

AVENGERS ENDGAME

RYAN MEINERDING

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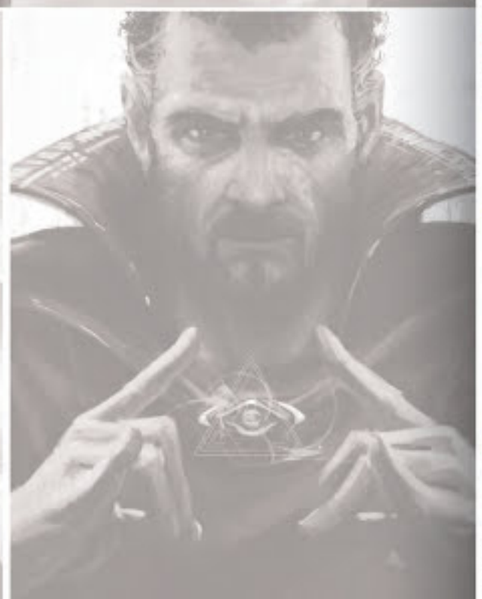

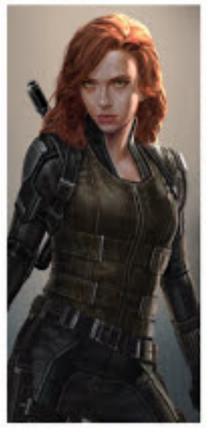
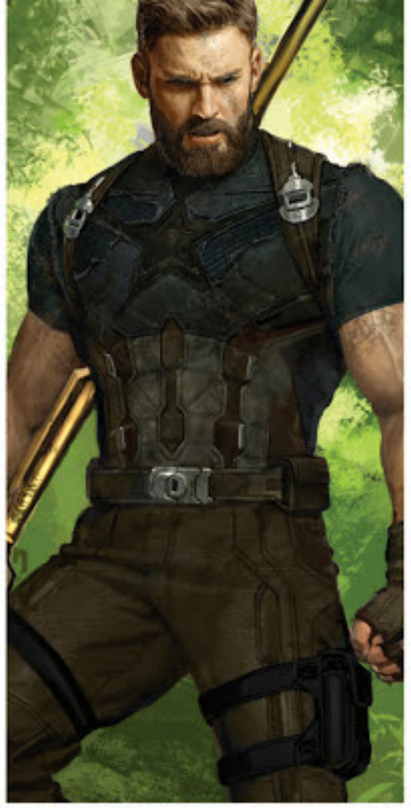

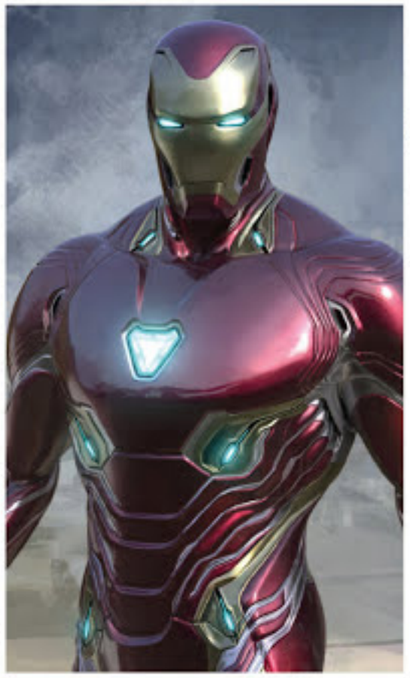

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■ **MEINERDING** RYAN MEINERDING

THE ROAD TO MARVEL STUDIOS AVENGERS ENDGAME

THE ART OF THE MARVEL CINEMATIC UNIVERSE

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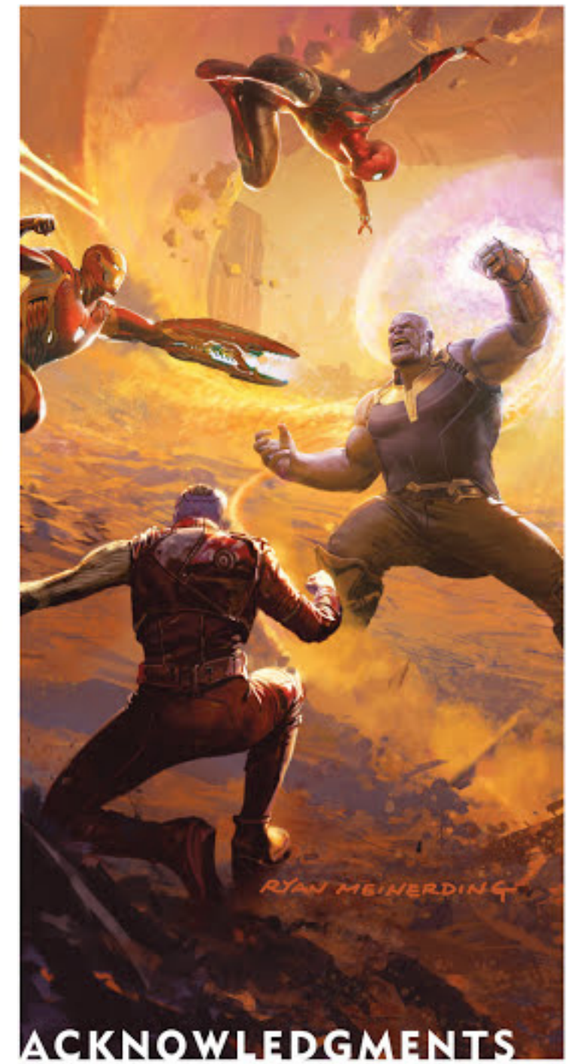
INFINITE POWER

THANOS

THE CHILDREN OF THANOS

THE AVENGERS

HEROES RETURN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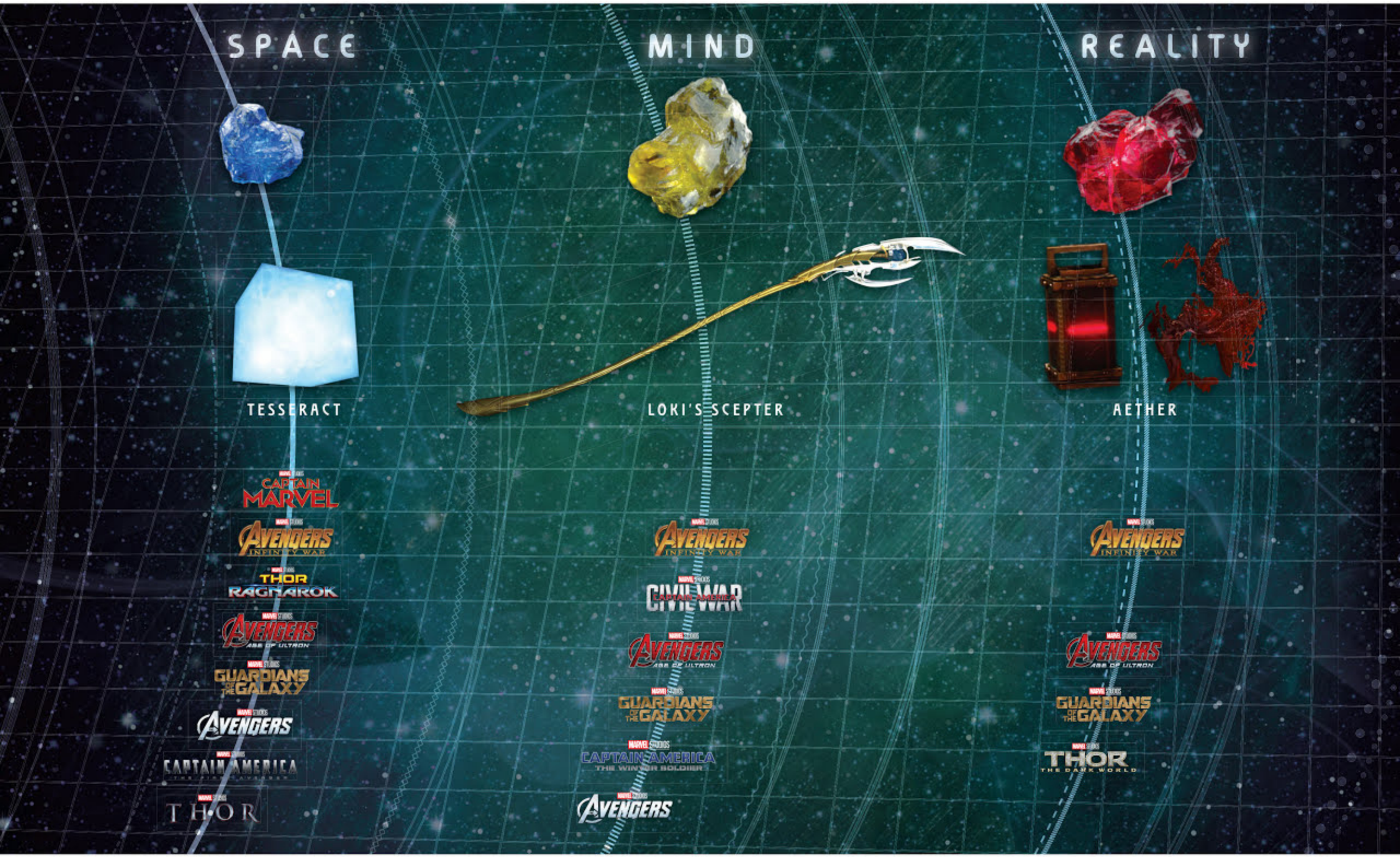
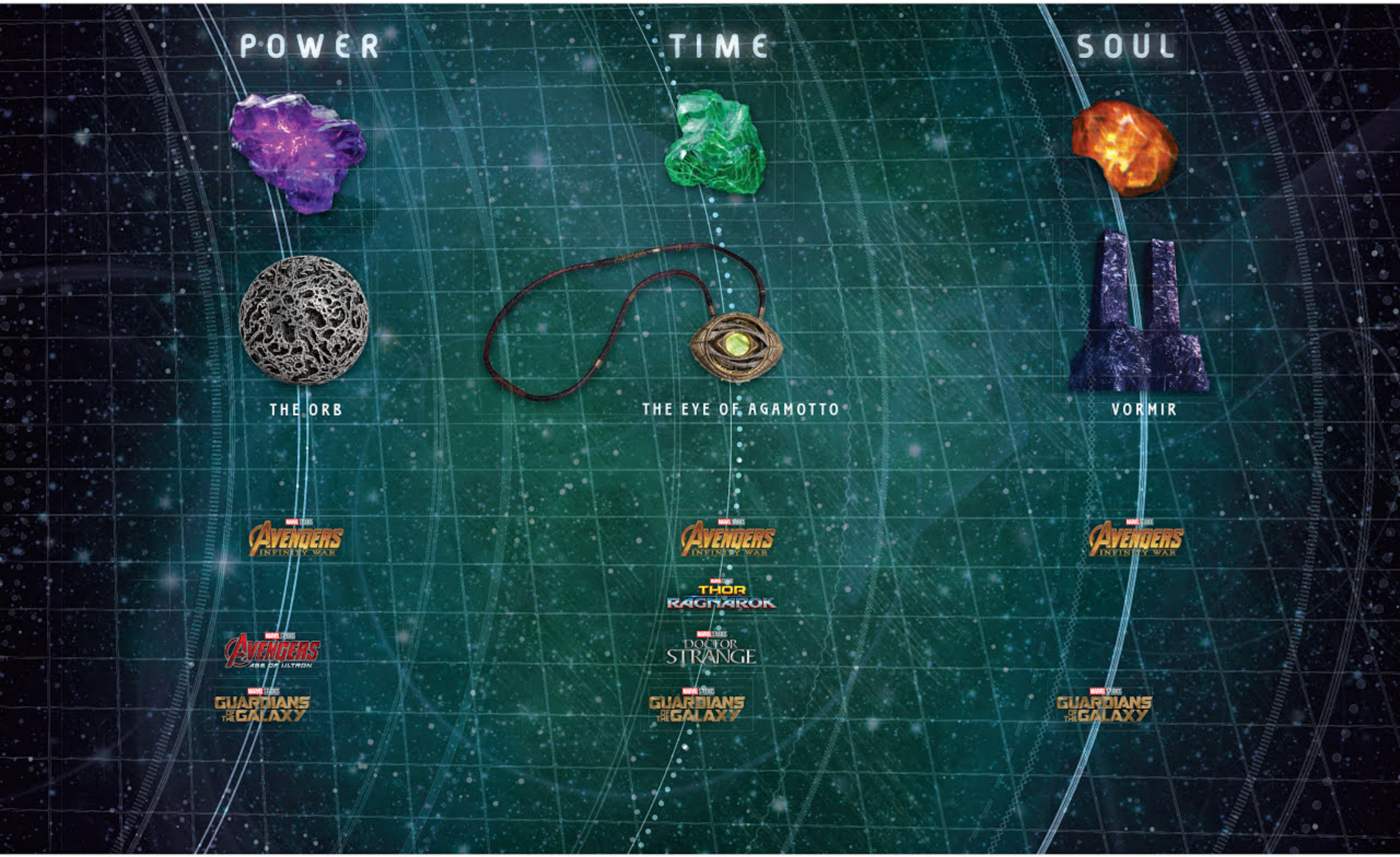
INTRODUCTION



We're in the Endgame now. All six Infinity Stones—Space, Mind, Reality, Power, Time, and Soul—have been revealed. "These Stones have been peppered in throughout the MCU," *Avengers: Infinity War* and *Avengers: Endgame* Executive Producer Trinh Tran says. "All of these movies have in one way or another introduced these Stones."

The Infinity Stones have been integral to the epic narrative created by the filmmakers at Marvel Studios. And while some of the cosmic Stones have appeared more frequently than others, all of them will be needed if our heroes are to undo what Thanos has done. For them, defeating the Mad Titan isn't a matter of *if*, but *when*.



INFINITE POWER

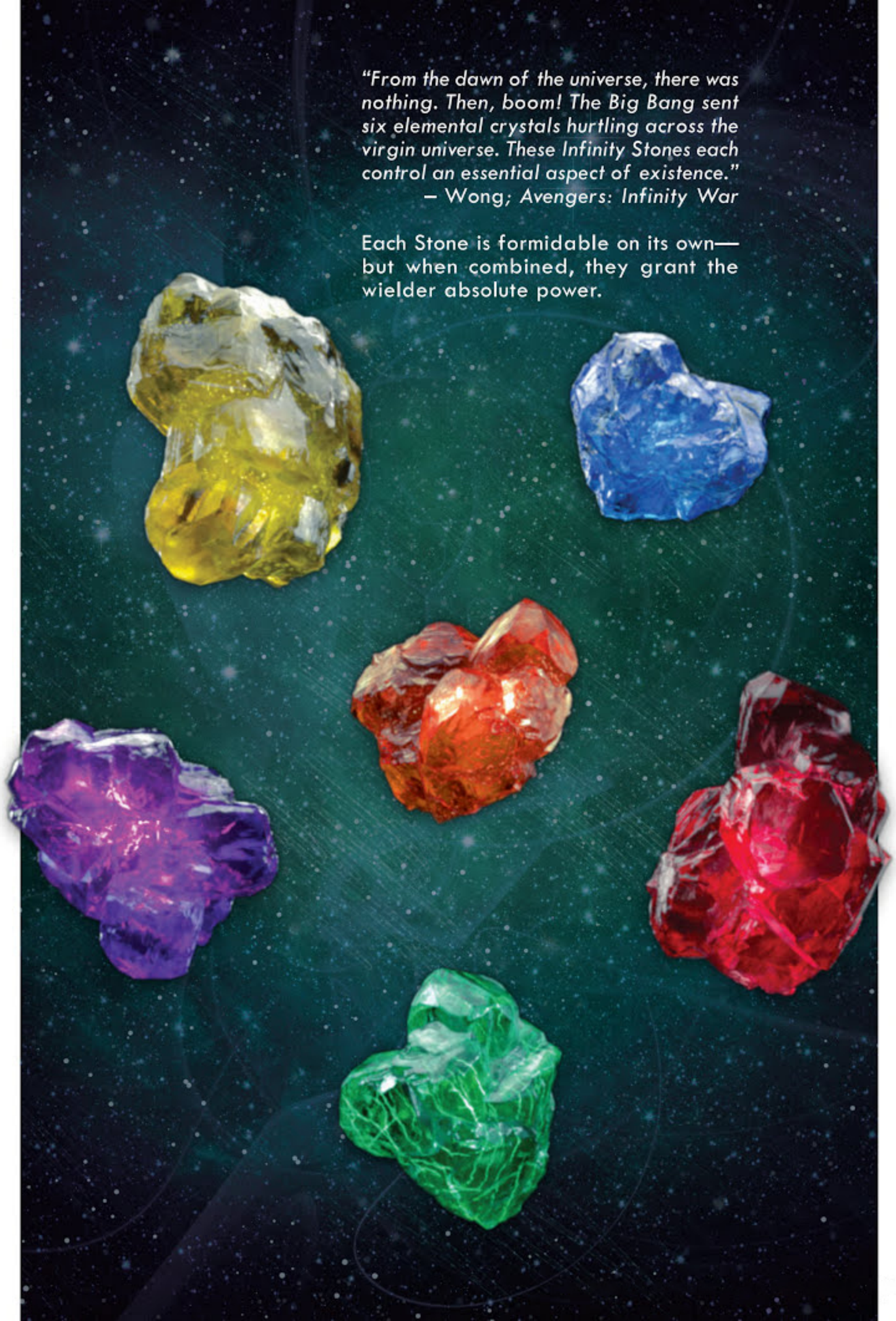
PRODUCTION STILL ▲

▲ TOP **BORRELLI**; MIDDLE **PRODUCTION STILL**; BOTTOM **HILL**

ARTIST ▶

"From the dawn of the universe, there was nothing. Then, boom! The Big Bang sent six elemental crystals hurtling across the virgin universe. These Infinity Stones each control an essential aspect of existence."
– Wong; *Avengers: Infinity War*

Each Stone is formidable on its own—but when combined, they grant the wielder absolute power.



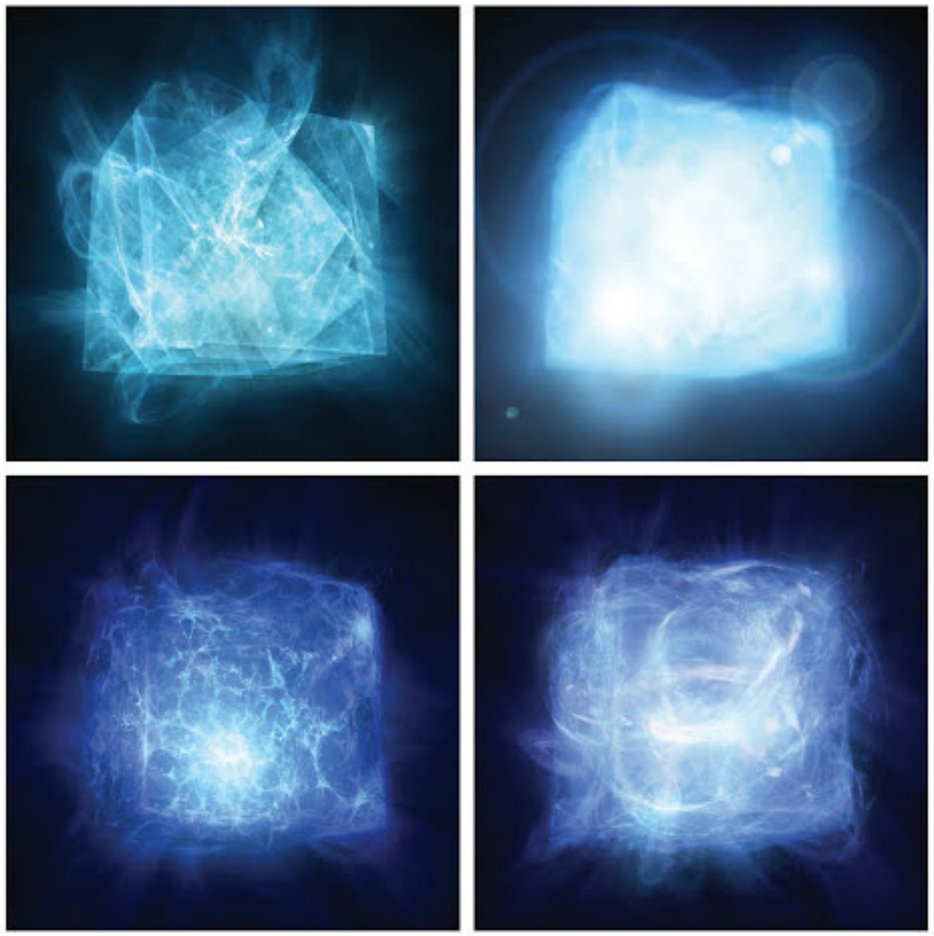
SPACE

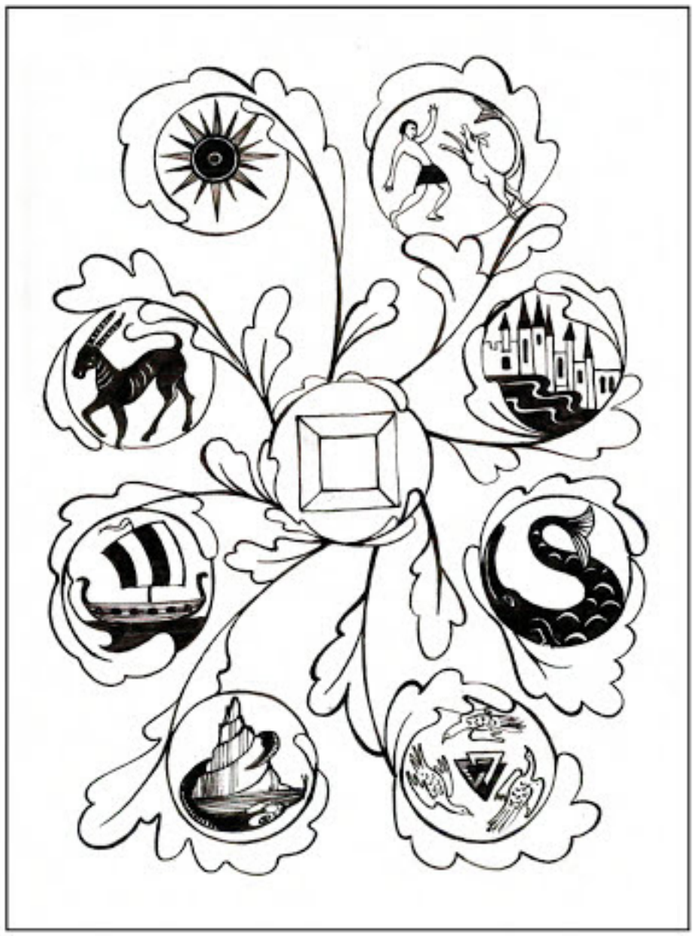
TESSERACT

TOP **FINAL PRODUCTION PROP** ▲
MIDDLE **PRODUCTION STILL**; BOTTOM **BORRELLI**

The Space Stone, which has the ability to generate wormholes for instantaneous travel throughout the galaxy, was contained within a cosmic cube called the Tesseract.

Johann Schmidt—A.K.A. the Red Skull, the head of Hydra—held a great interest in Norse mythology. He sought out the Tesseract, an Asgardian artifact many believed to be myth. Schmidt uncovered the cube in Tønsberg, Norway, at the height of World War II. It is unknown how long this jewel of Odin's treasure room had been there before Hydra claimed the artifact, which was integral to their rise in power.

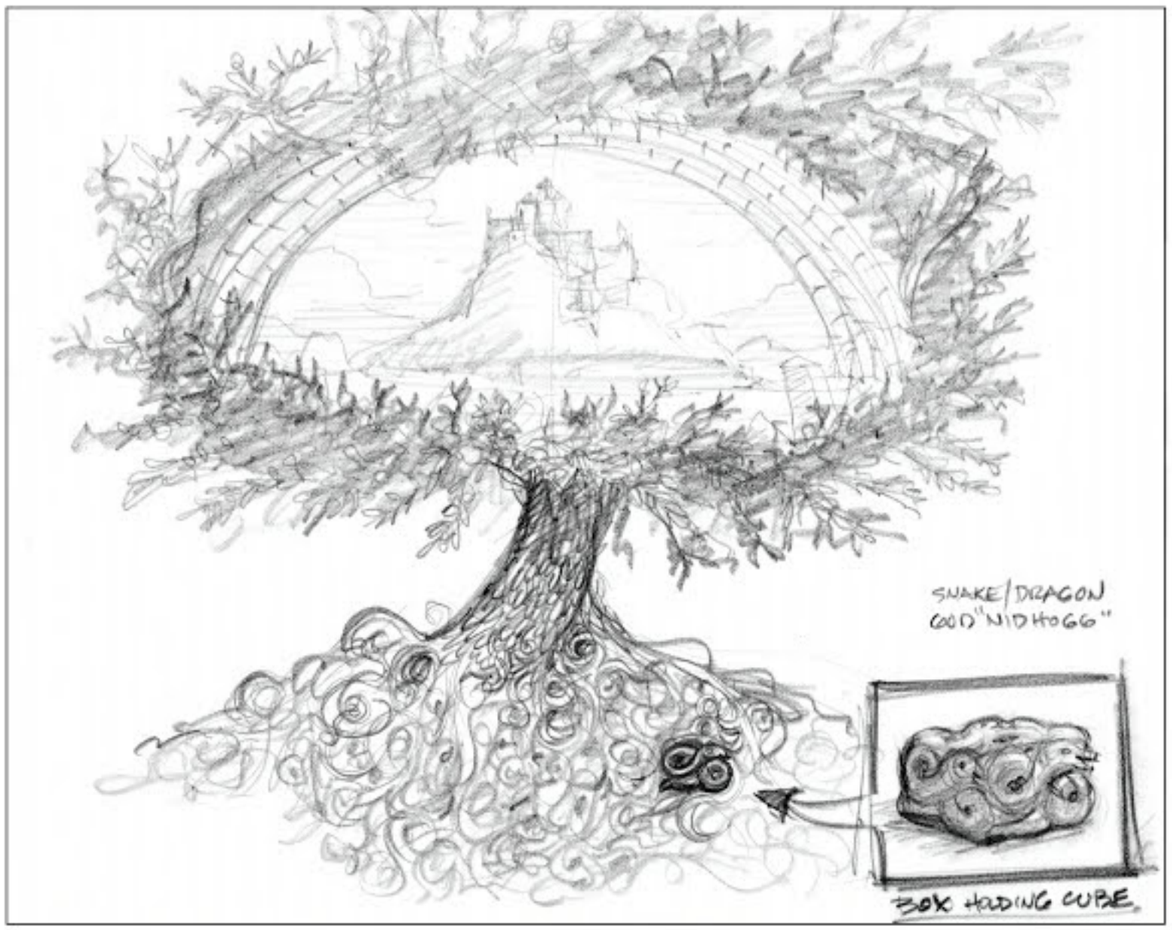


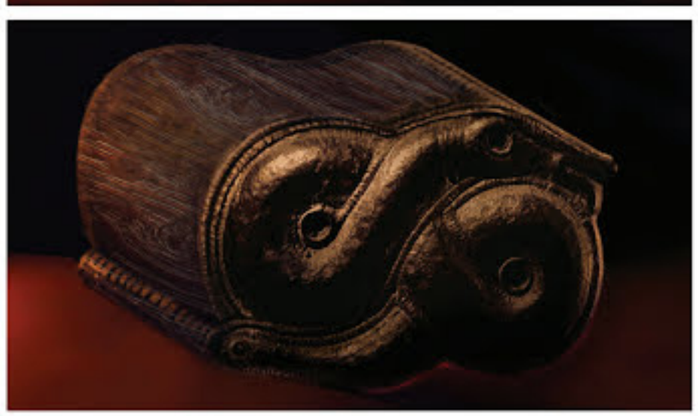


◀ WEN ▲ BORRELLI

▲ MIDDLE & BOTTOM **DOUBLE NEGATIVE** ▲

▲ CARSON





▲ TOP **HEINRICHS**; BOTTOM LEFT & RIGHT **BORRELLI**

Central to the space where the Tesseract was found was a giant carving of Yggdrasil—the Asgardian World Tree—which contained a hidden compartment housing the cosmic cube. "This set had so many great elements," *Captain America: The First Avenger* Director Joe Johnston says. "That entire tree of the world sculpture was done in clay by the sculptors and then was cast in fiberglass."

"There were a lot of versions," Cinematographer Shelly Johnson says. "I remember when I arrived, going through the art department, going through all of their concept art. There were dozens of versions of that tree."

▲ TOP & BOTTOM **FINAL PRODUCTION PROP**; MIDDLE **BORRELLI**

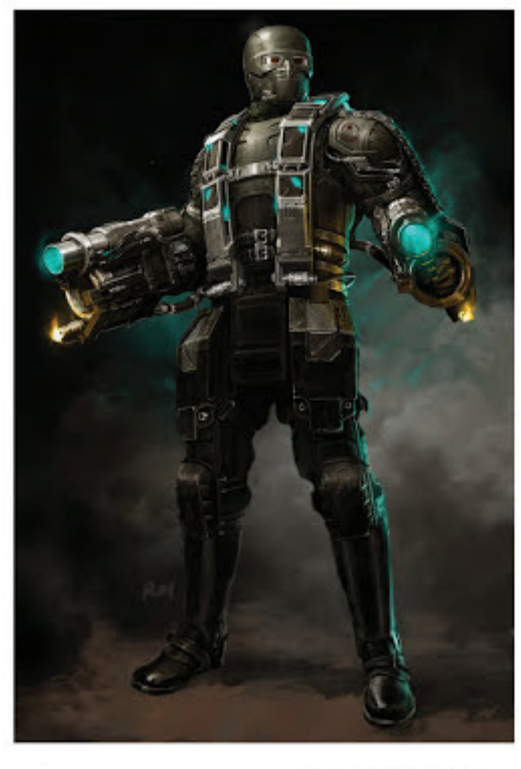
▲ **FINAL PRODUCTION PROP**

During development, artists collaborated to depict Hydra's ability to harness the Tesseract's energy. "When I started working on Hydra-tech concepts, there had been a number of artists that had taken stabs at it," Head of Visual Development Ryan Meinerding says. "[Concept Artist] Paul Catling had worked on a couple of versions that had a milled-aluminum approach to the guns, and I just continued that forward and tried to find ways of making them feel like it was a piece of technology mixed with a gun. I suggested that if you're going to weaponize the Tesseract's energy—if you're going to store it—those storage mechanisms should be something rectilinear. And if you want to use that energy and shoot it, then you have to channel that energy into something cylindrical. So that's a simple-shaped thing that we did."

FINAL PRODUCTION PROPS ▲

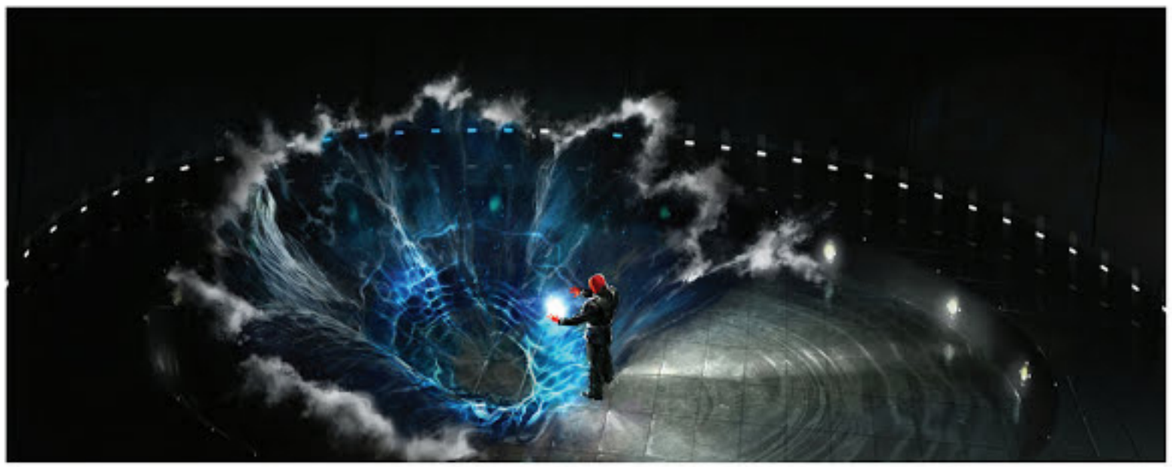
ROAD TO AVENGERS: ENDGAME

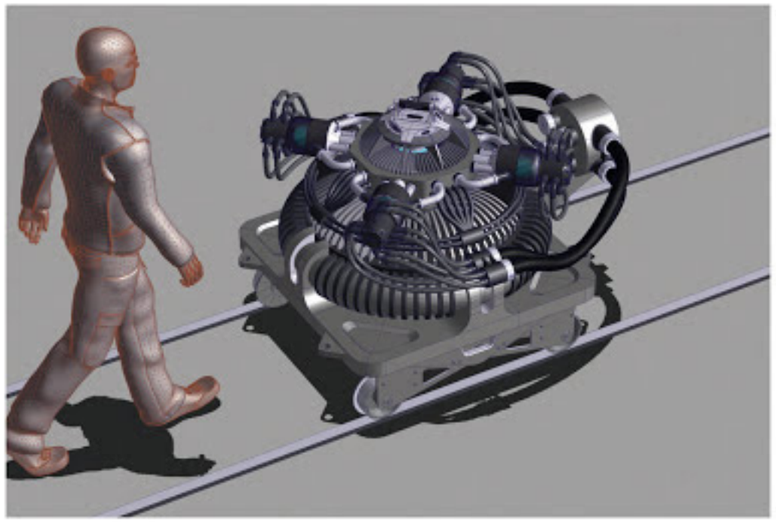
MEINERDING ▲

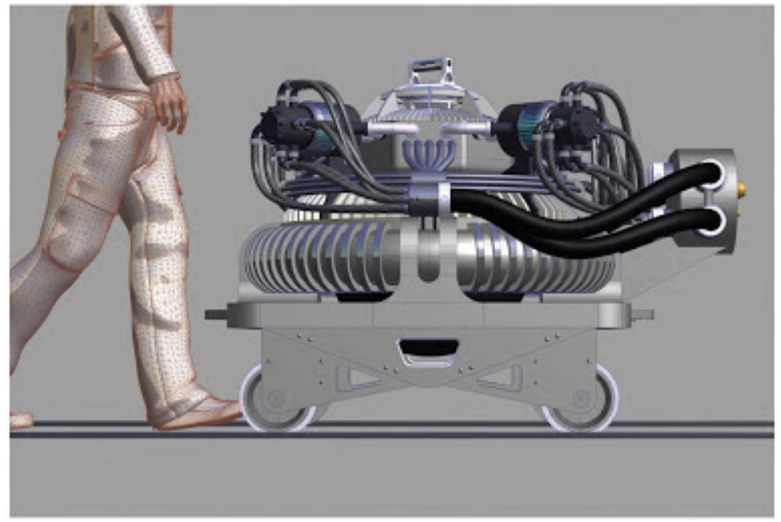


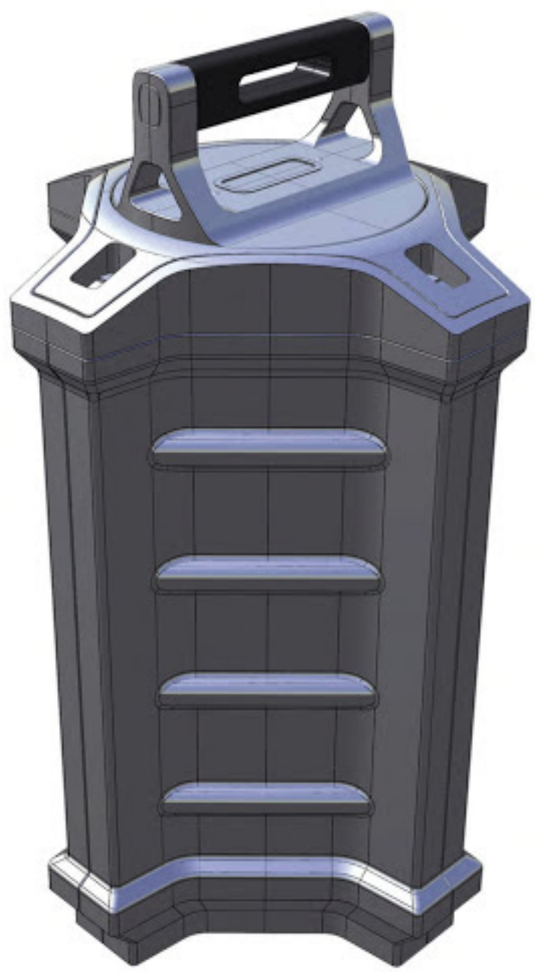
MEINERDING ▲

MEINERDING ▲ TOP BORRELLI ▲

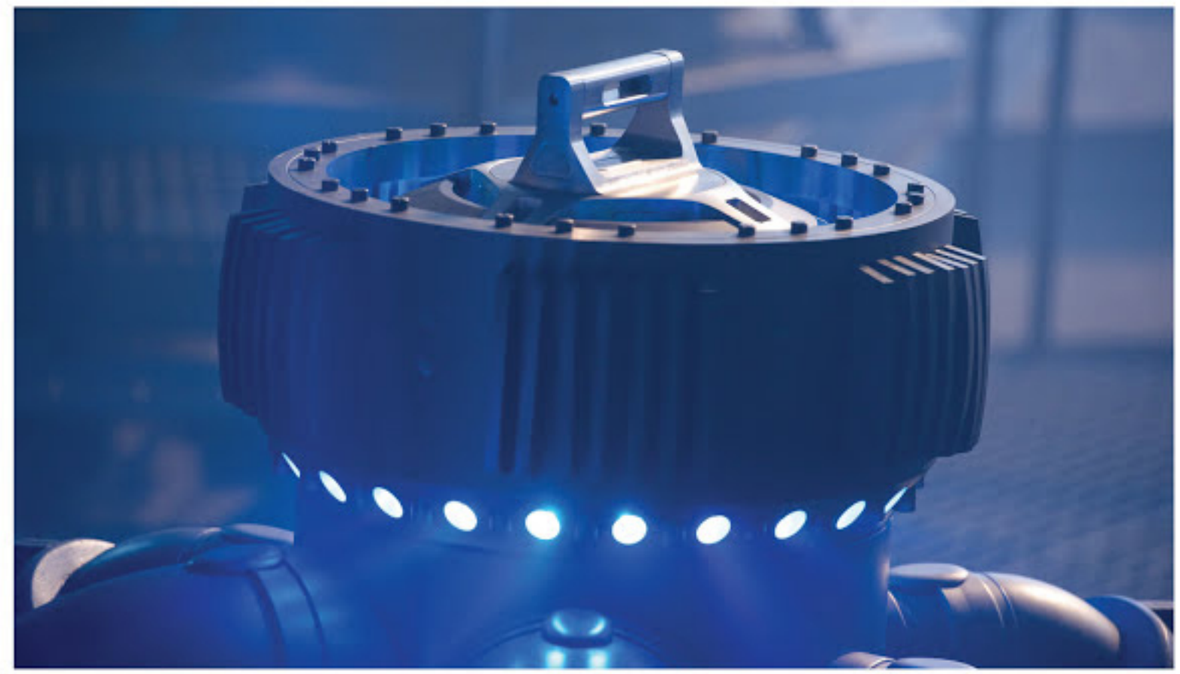




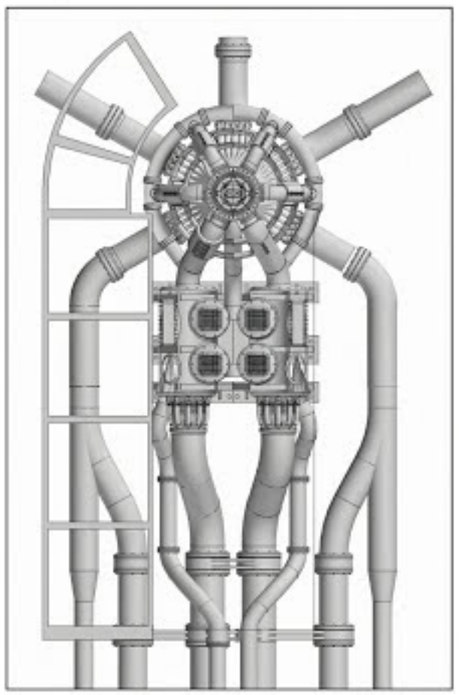




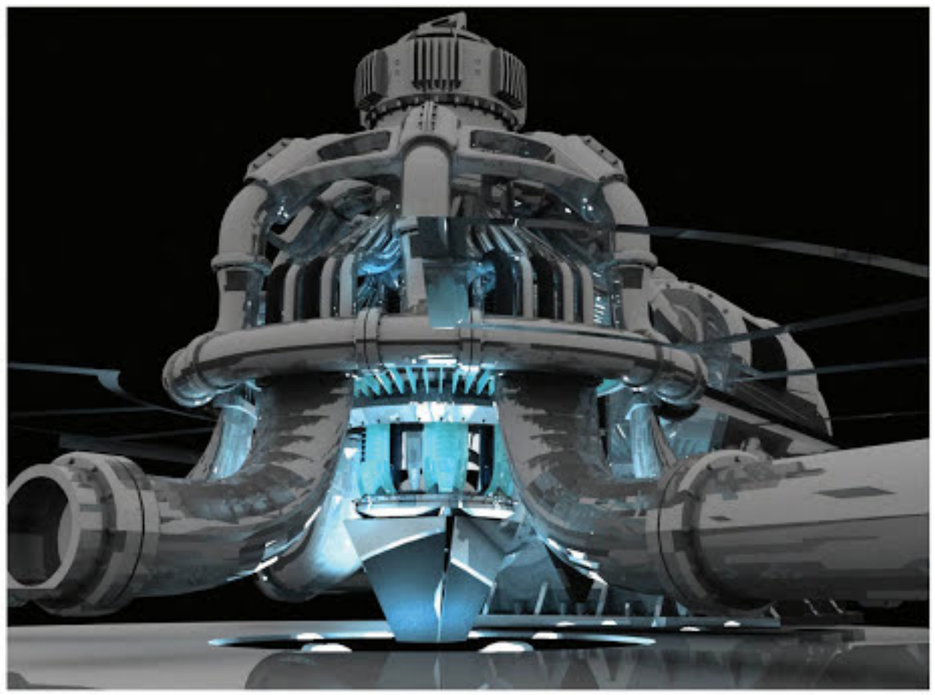
▲ LEFT **FINAL PRODUCTION PROP**; RIGHT **WALKER**



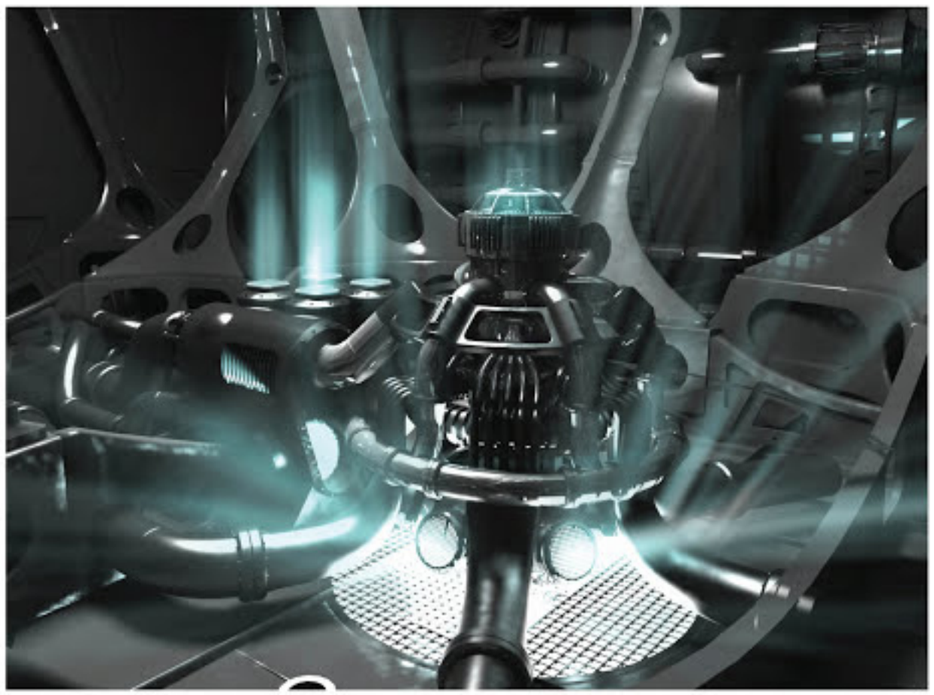
▲ TOP **PRODUCTION STILL**



▲ KNOX-JOHNSTON



▲ CATLING



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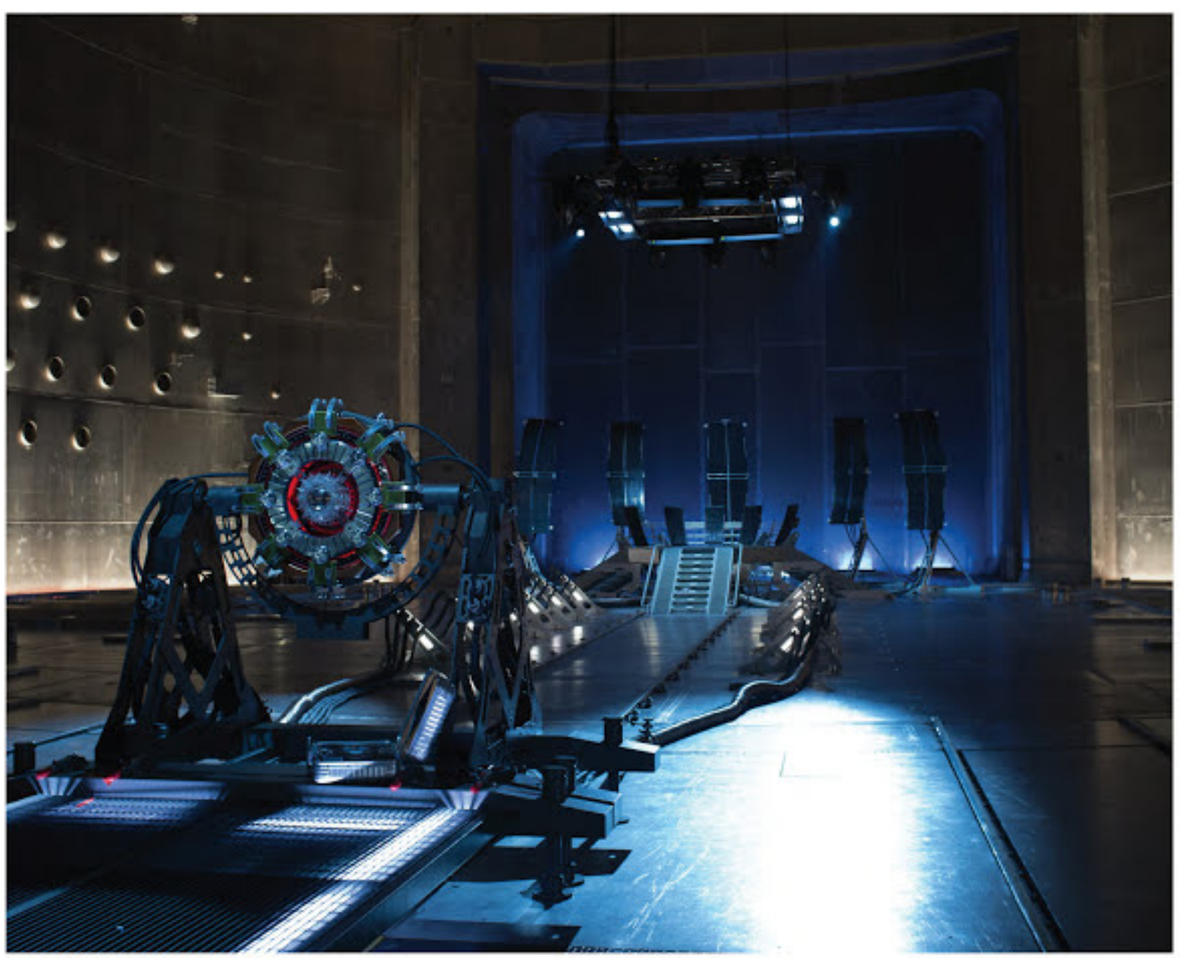
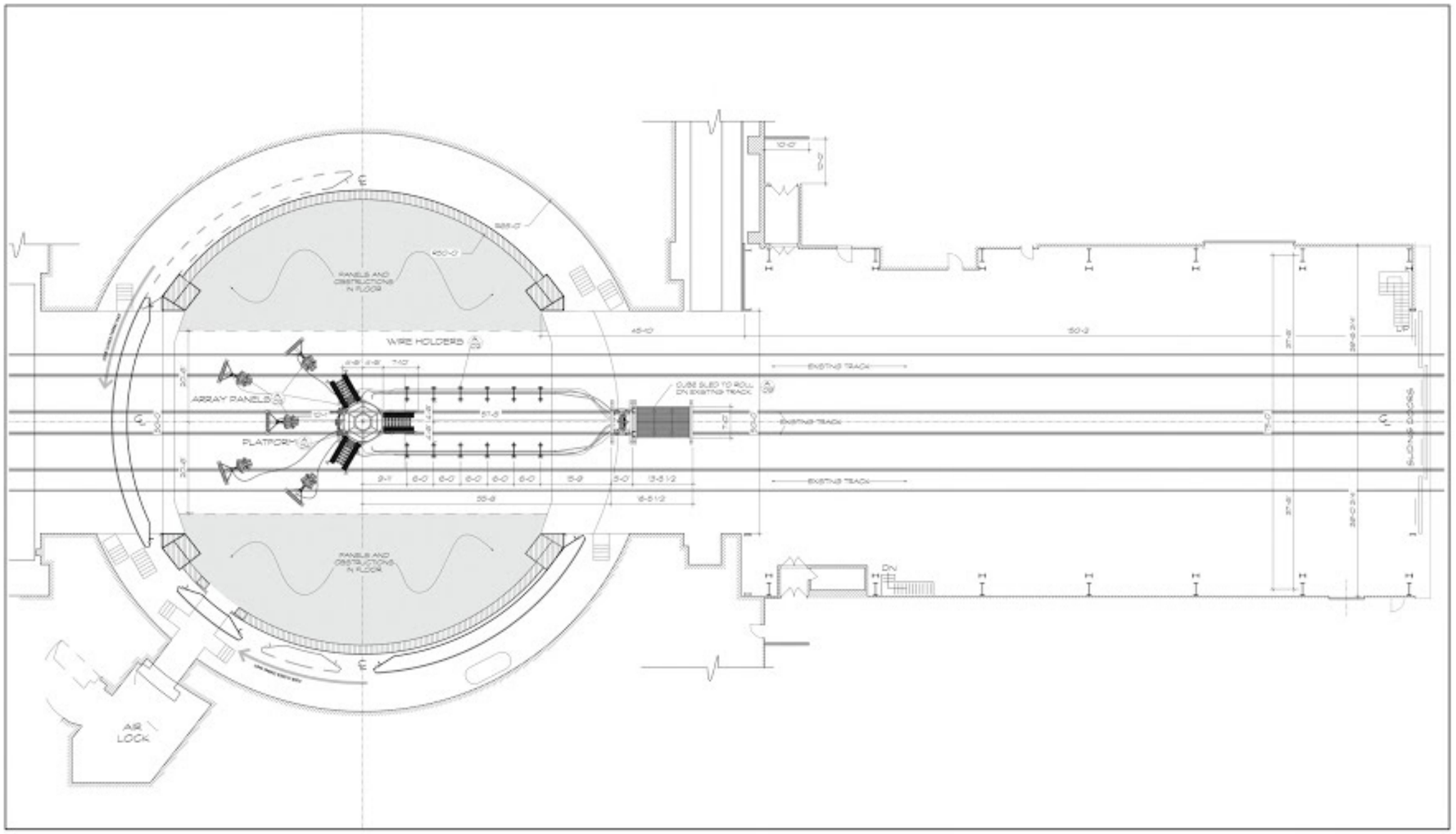


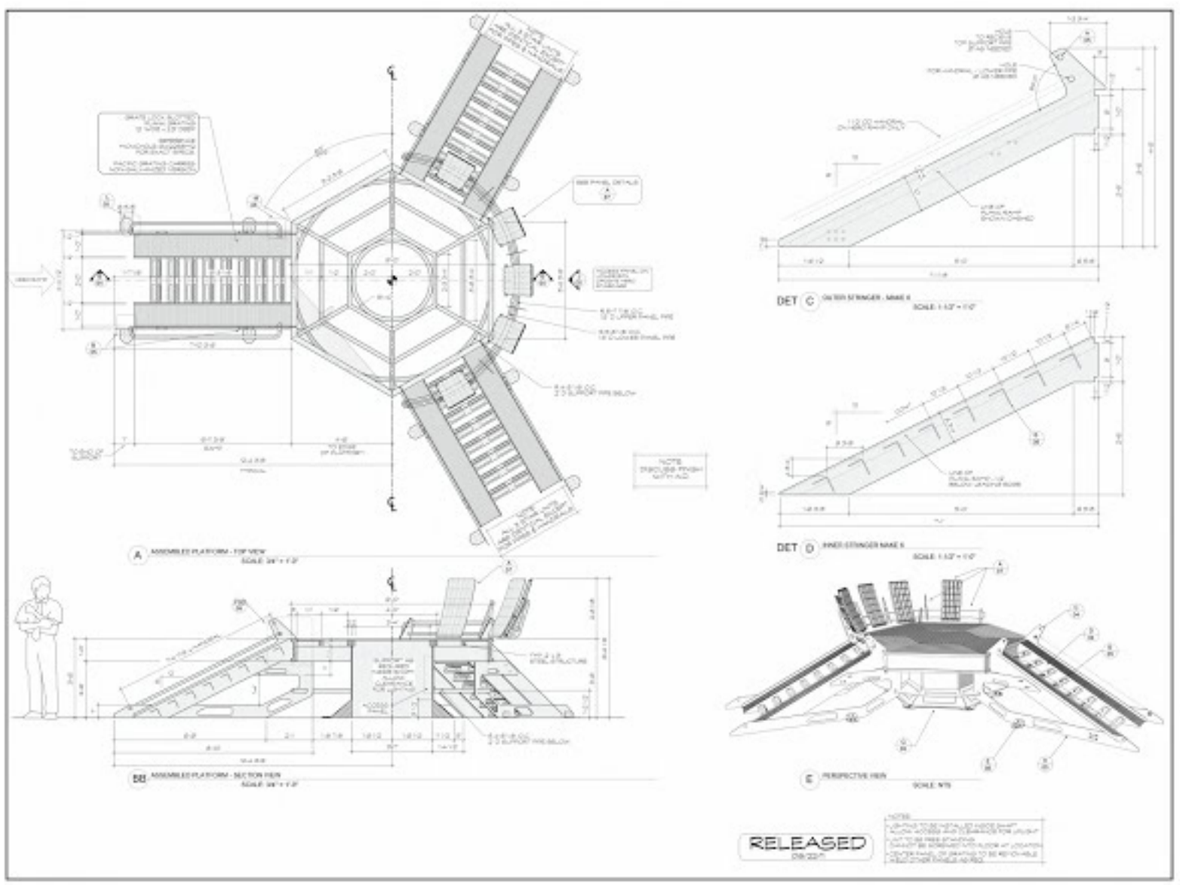
PRODUCTION STILL ▲

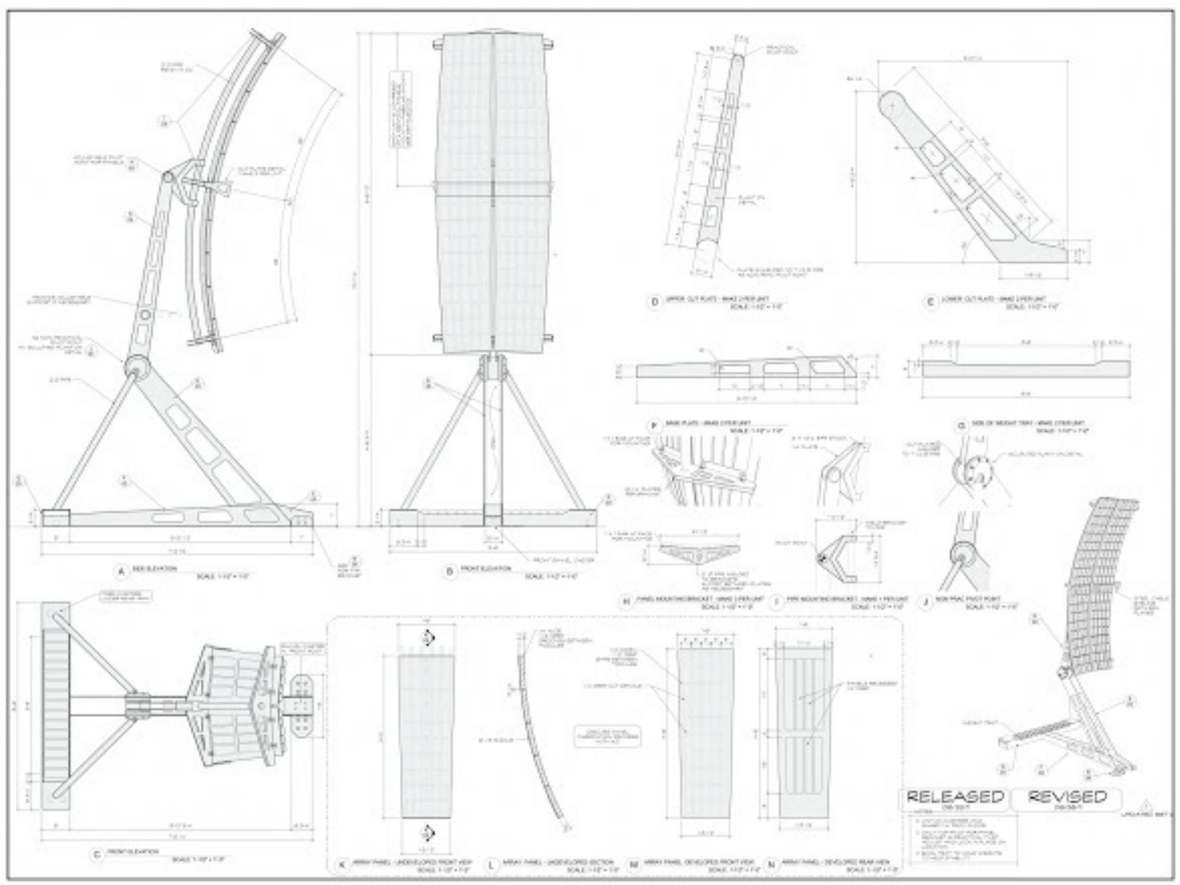
TOP & BOTTOM RIGHT: JUNG ▲

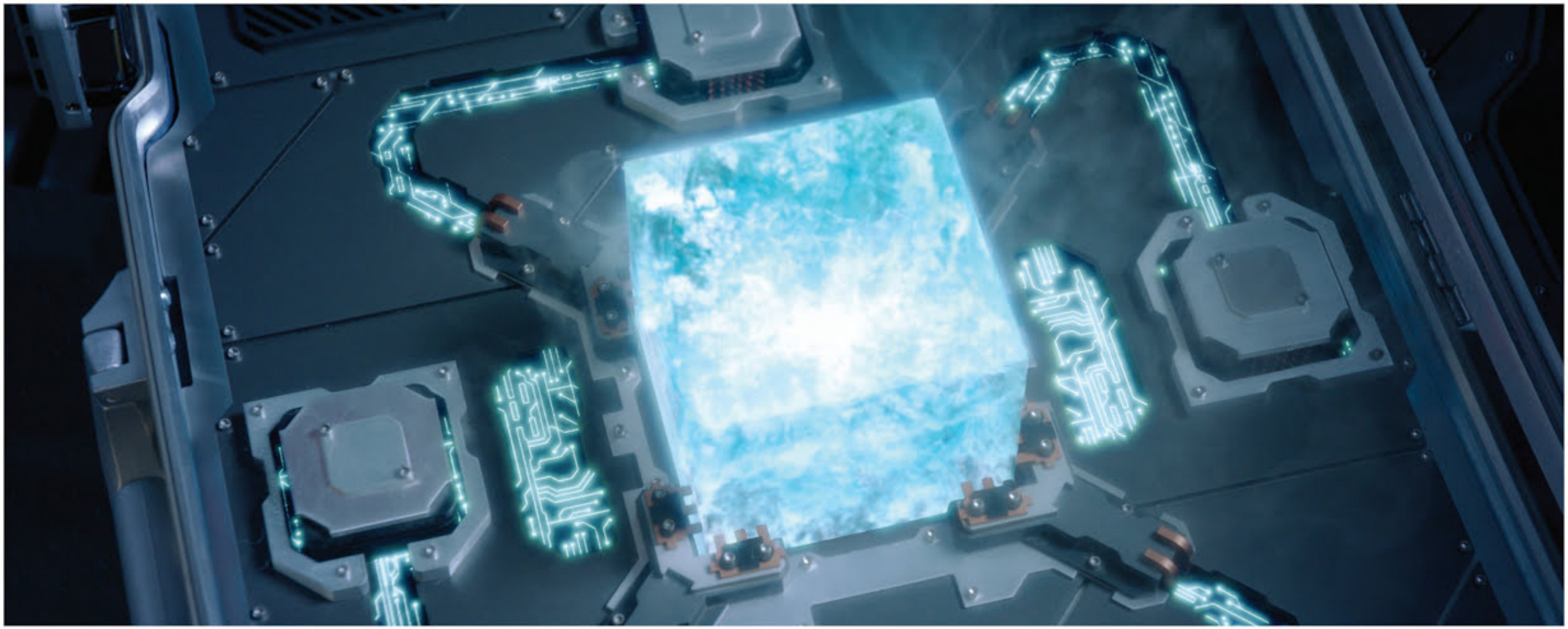


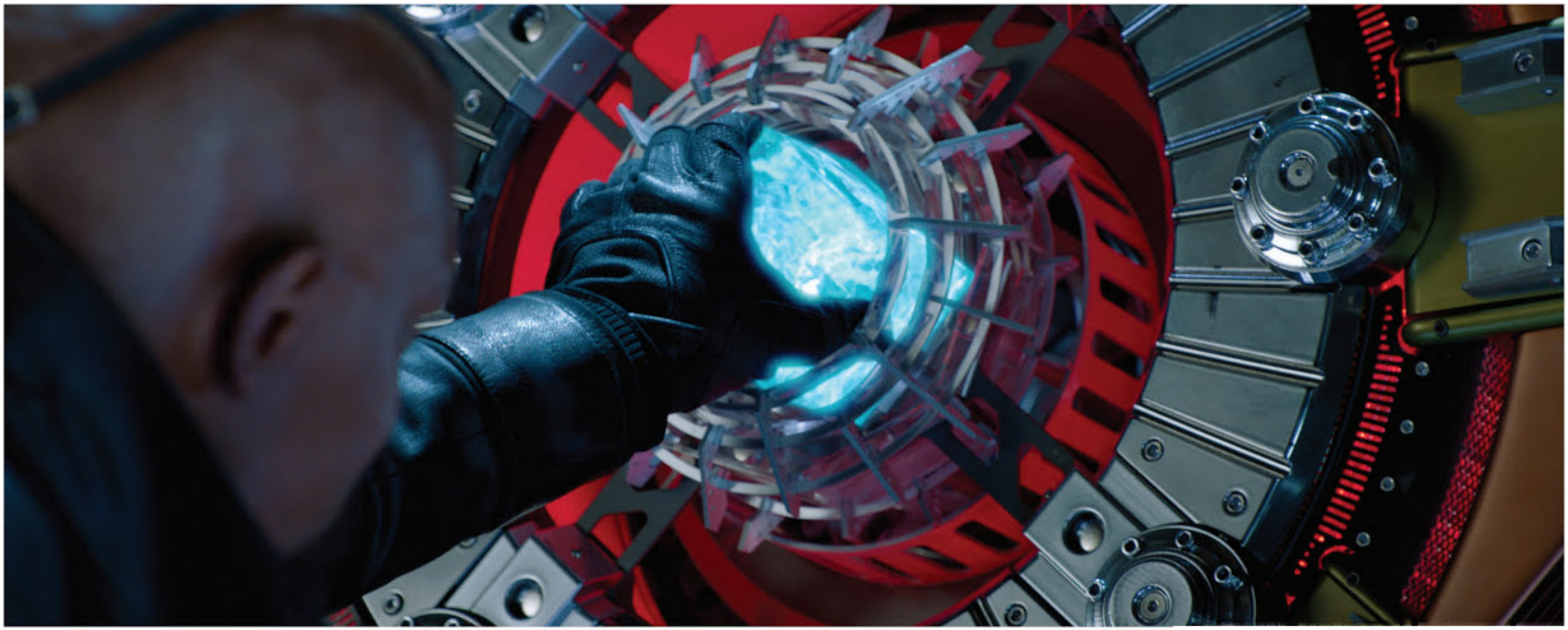
The cosmic cube appeared again when S.H.I.E.L.D. recruited astrophysics professor Dr. Erik Selvig to study the Tesseract. "Throughout the entire prep period of *Marvel's The Avengers*, the S.H.I.E.L.D. facility was a constantly evolving set of puzzle pieces as we had several locations that came and went," Production Designer James Chinlund says. "We literally did a nationwide search looking for just the right spaces, with the requisite grandeur to contain the action of the opening sequence. In the end, we wound up with a group of locations literally spread across four states."

This chamber room, where the Tesseract opened the portal through which Loki emerged, was filmed at NASA's Plum Brook Station in Sandusky, Ohio.

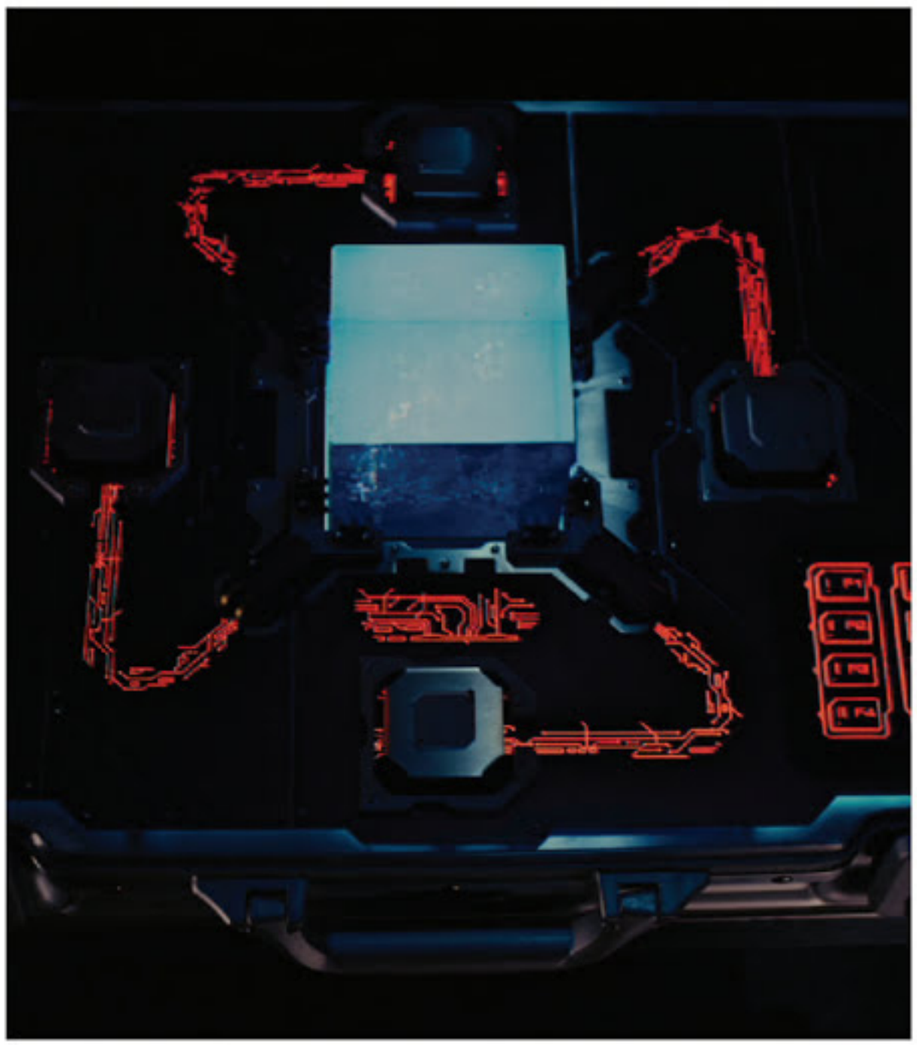




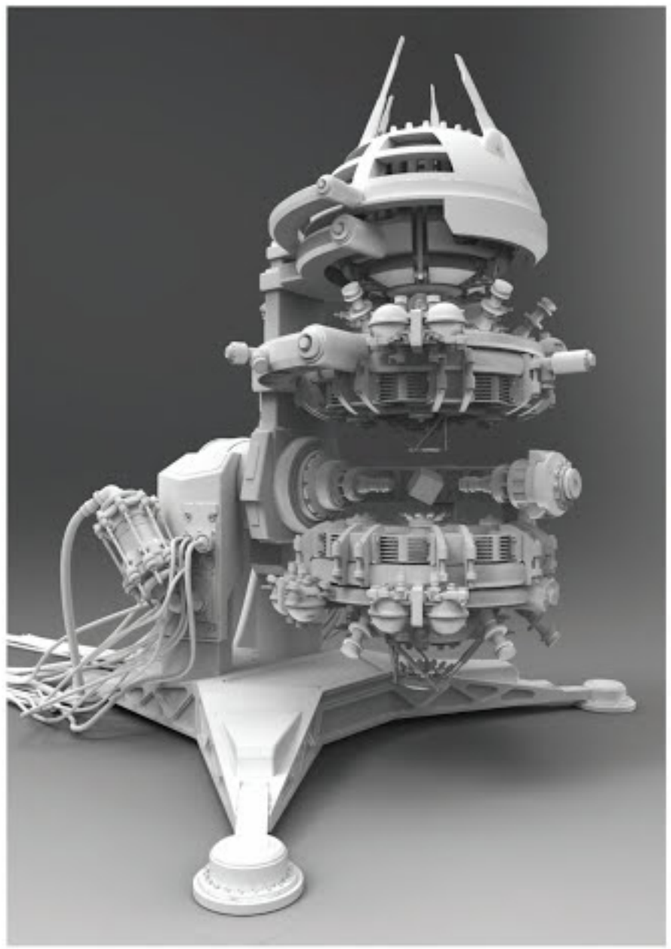


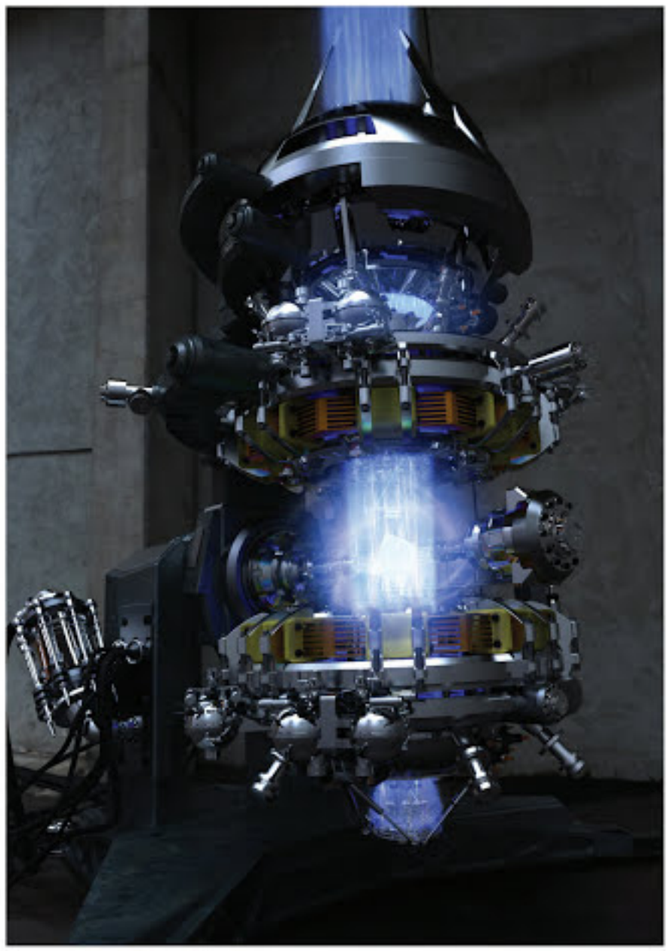


To contain the Tesseract, Prop Master Drew Petrotta and his team designed a suitcase of sorts, which appears in the end-credits tag for *Thor* and various scenes in *Marvel's The Avengers*. The cube's energy is channeled through the case's interior.



▲ TOP **PRODUCTION STILL**; BOTTOM **SIMON MARVEL STUDIOS** ▶
◀ **PRODUCTION STILLS**

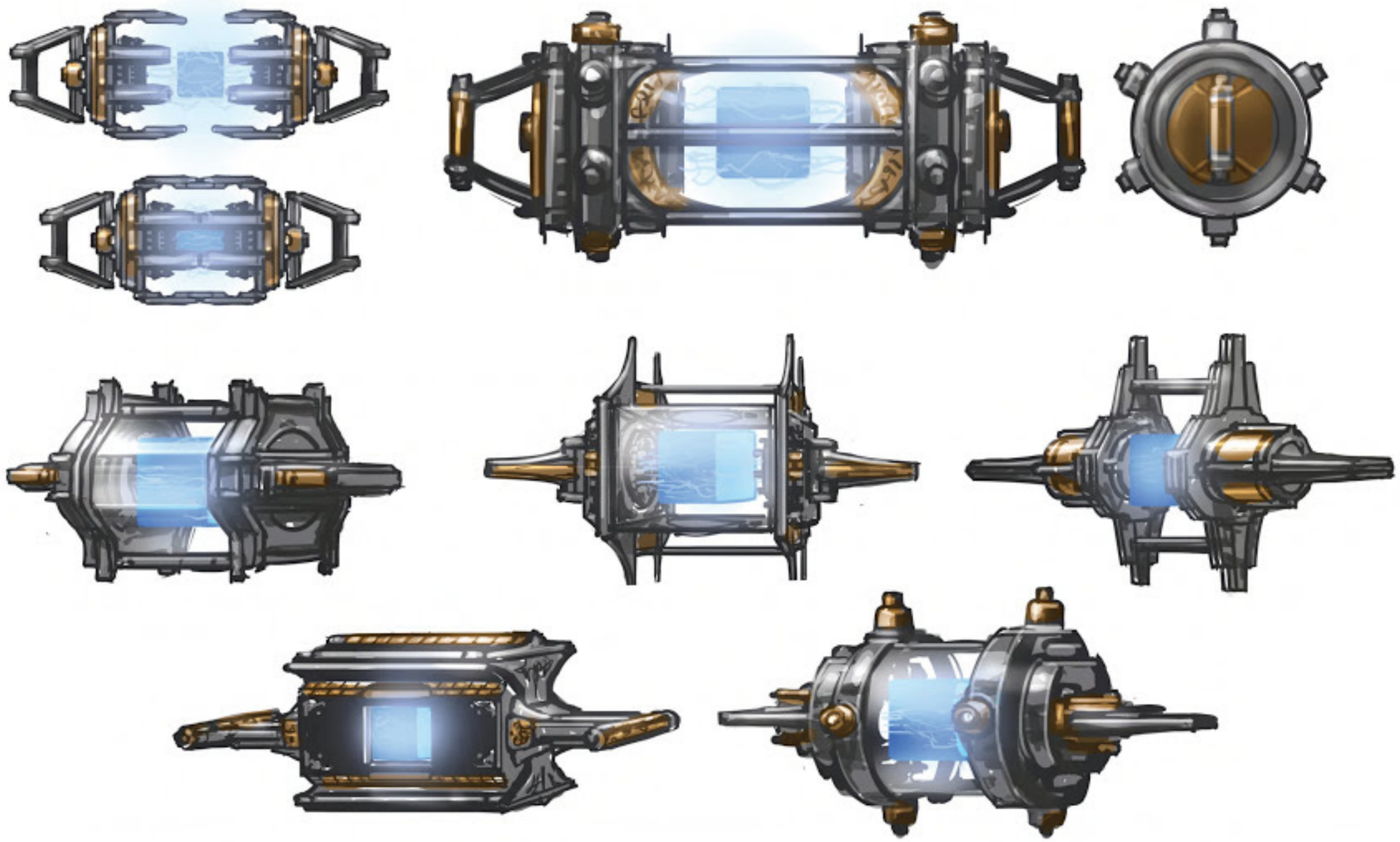


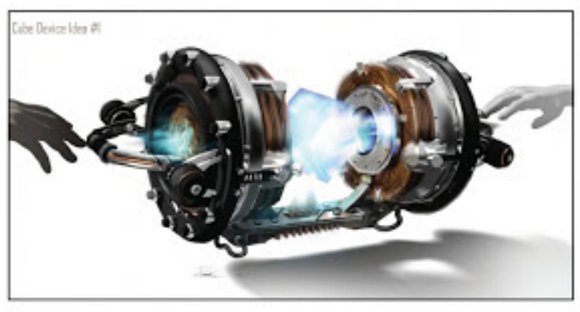


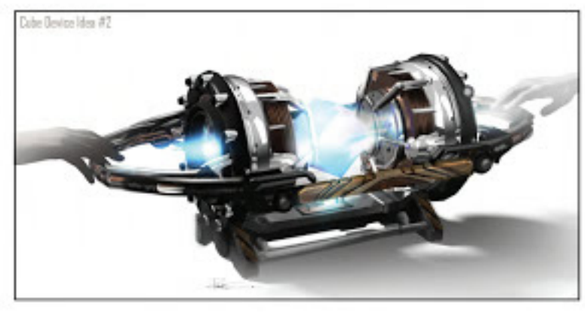
ROAD TO AVENGERS: ENDGAME TOP **PARK**; BOTTOM **KUNITAKE** ▲

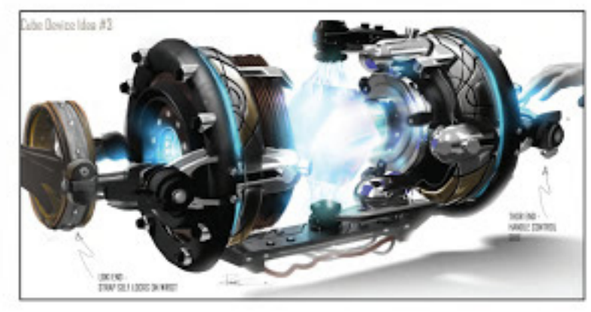
TOP **PRODUCTION STILL**; BOTTOM **KUNITAKE** ▲

"After the Avengers defeated Loki and the alien Chitauri army, they wanted something to contain the Tesseract," Director of Visual Development Andy Park says. "Something that both Thor and Loki could hold and do some kind of switching or twisting or whatever that would transport them back to Asgard. So I came up with different ways that it could clamp together, putting it in some container more like an Ark of the Covenant style—some a little bit more sci-fi, others that look like those old bank-teller cylinders, all with a look that was somewhat Asgardian."









TOP **PARK**; MIDDLE **FUENTEBELLA**; BOTTOM **PRODUCTION STILL** ▶

Thanos, the puppeteer behind Loki's attack on New York, has been chasing the Infinity Stone within the Tesseract for some time. In the opening sequence of *Avengers: Infinity War*, he finally gets hold of it. "I feel like this scene epitomizes what he said at the end of *Avengers: Age of Ultron*," Senior Concept Illustrator Jackson Sze says. "When he says, 'I'm going to do it myself.' I think this is like a culmination of that scene where he's actually going for it, as opposed to relying on proxies like Ultron and Loki."

With each Stone Thanos collects, his purpose becomes more focused. "He knew he didn't have to kill everyone," Meinerding says. "He knew he didn't have to slaughter people. He just needed to get the Stones to accomplish what he wanted. And as a result of that, he became a little more balanced himself, and he wasn't wantonly killing people even though he's able to. He wasn't bloodthirsty. He wasn't all of those things he could have been in the past."

PRODUCTION STILL ▲ TOP SZE; BOTTOM SCHIBLE ▶

MIND

LOKI'S SCEPTER

The Mind Stone possesses the ability to manipulate others. Originally contained in the scepter given to Loki by the Other, a minion of Thanos, the yellow Stone was instrumental in bringing the Vision to life.

It was important to tie the scepter's design with its predominant wielder. "I was tasked with designing a keyframe for the scene where Loki and Cap face off against each other," Senior Concept Illustrator Rodney Fuentebella says. "The reason why was we wanted to give a take on the scepter that would complement the design of Loki that Charlie [Wen] made. The scepter is reminiscent of his horns. We wanted something that had some asymmetry and looked unique—something a little deadly, but still elegant.

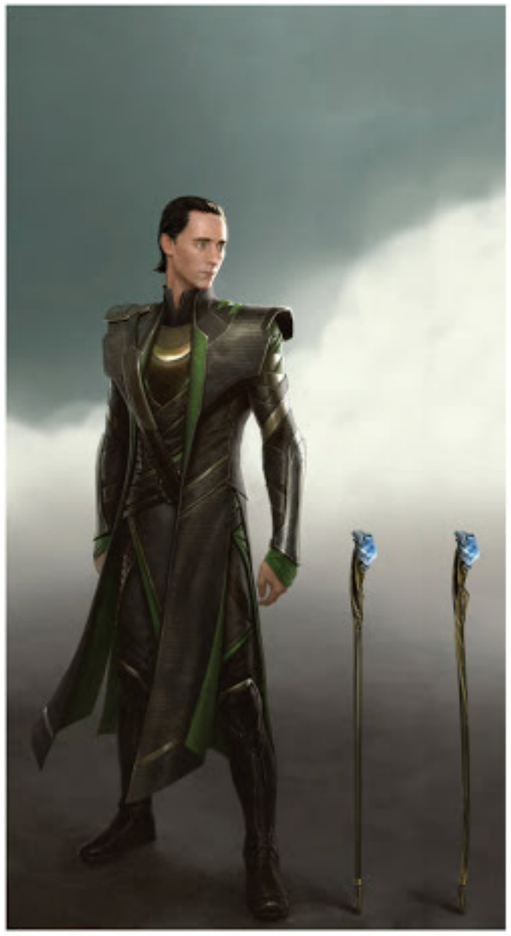
"His staff has three stages: It's a scepter, a staff and the walking stick. We wanted it to feel like it had this elegant transition between all three. So whenever he uses it, or whenever it's on-screen with him, it fits his personality; it fits his look."

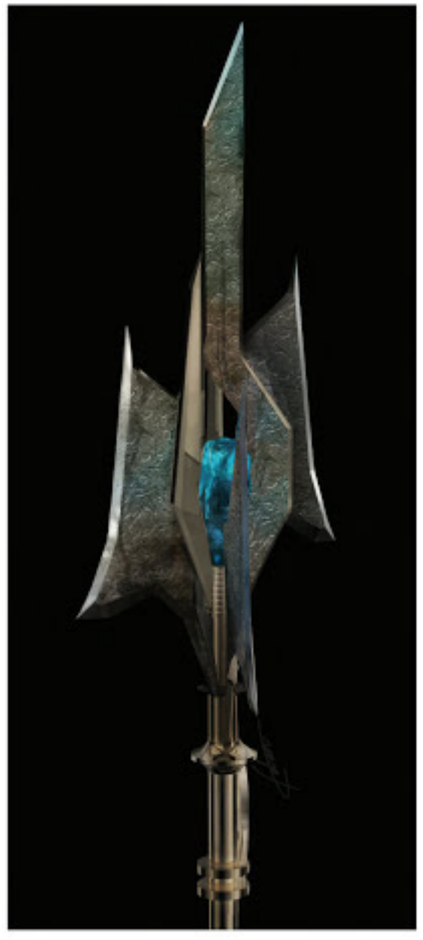
PREVIOUS **STAUB** ■

TOP **PARK**; BOTTOM **PRODUCTION STILL** ▲ **FINAL PRODUCTION PROP** ▶

▲ TOP PARK ▲ FUENTEBELLA

▲ PRODUCTION STILL





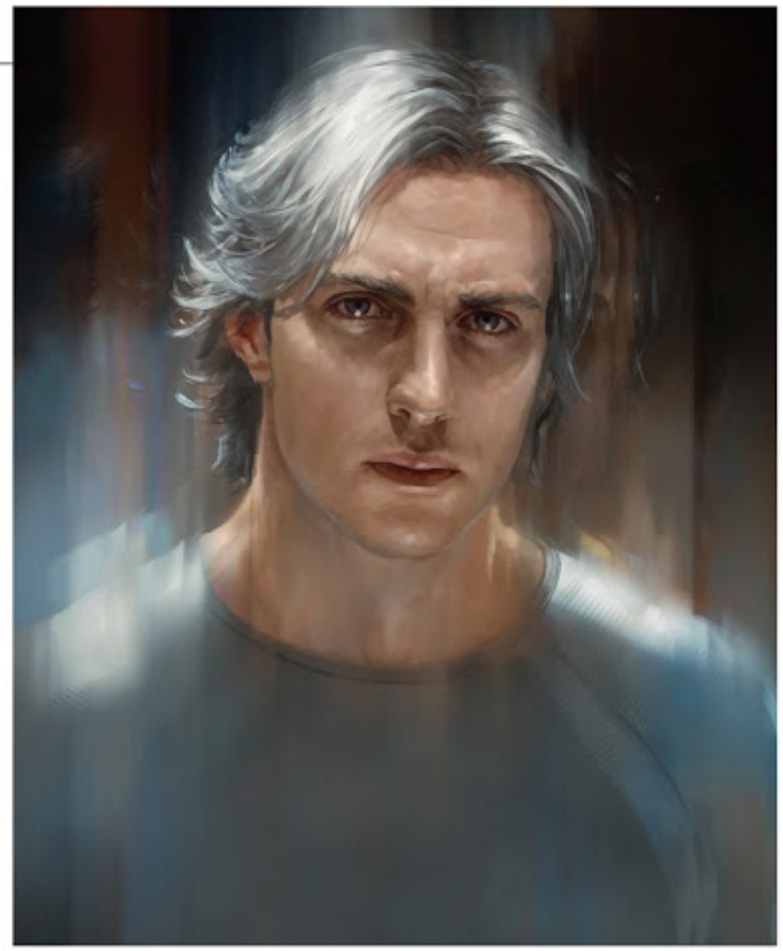
TOP **WEN**; BOTTOM **LACEY** ▲ **WEN** ▶

Loki failed in his mission on Earth, and S.H.I.E.L.D. took possession of his scepter following the Battle of New York. But with enemy agents having secretly infiltrated the organization, Loki's scepter soon became a tool of Hydra. The evil institution began experimenting on the staff, hoping to unlock its secrets and advance their cause.

▲ AINSWORTH

▲ PRODUCTION STILLS

Hydra's experiments on Loki's scepter led to the enhancement of Sokovian twins Wanda and Pietro Maximoff, empowering the siblings with amazing abilities—Wanda with telekinesis, mental manipulation, and neuroelectric interfacing; and Pietro with superhuman speed.

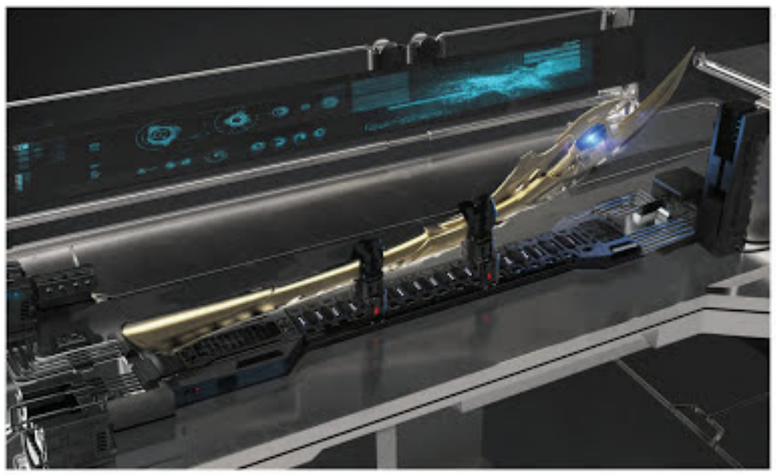


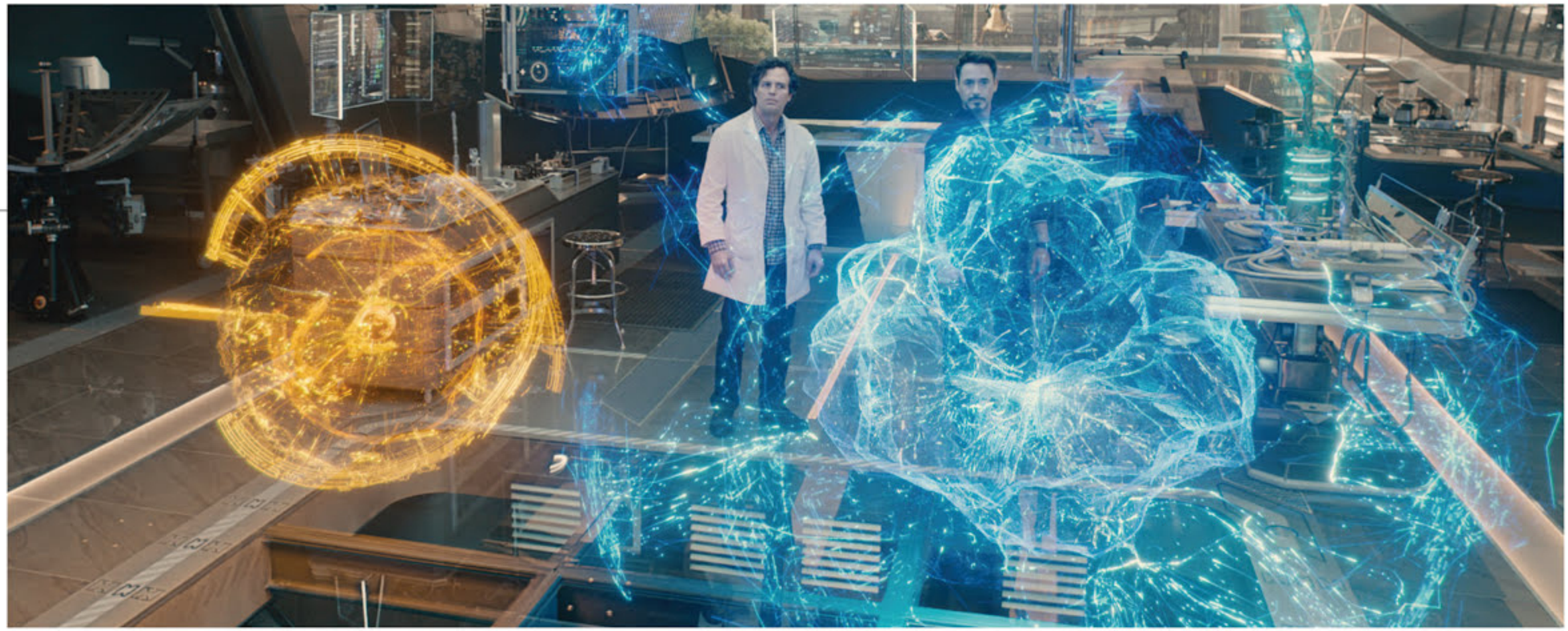
▲ PARK ▲ MEINERDING ▲ PARK

Searching for Loki's scepter, the Avengers raided a Hydra base in Sokovia. After successfully retrieving the scepter, Tony Stark brought it back to the Avengers Tower in New York City for further research. "Avengers Tower was an amalgamation," Production Designer Charles Wood says. "We saw the living areas where the Avengers could be, where they would congregate, where they would train, etc. The whole concept to the set, which was built practically in London, was that you could walk through from one part of to another. From the living room to the lab to a back room to the training area—it's all connected. A lot of the equipment Tony had in there was stuff based on Stark Industries tech, which was no longer military. Quite a lot of work we did in here had to do with bio-industry and ecology and Tony trying to come up with new sources of power—the whole idea being that he was a forerunner in a new wave ecological design, more of a philanthropist."

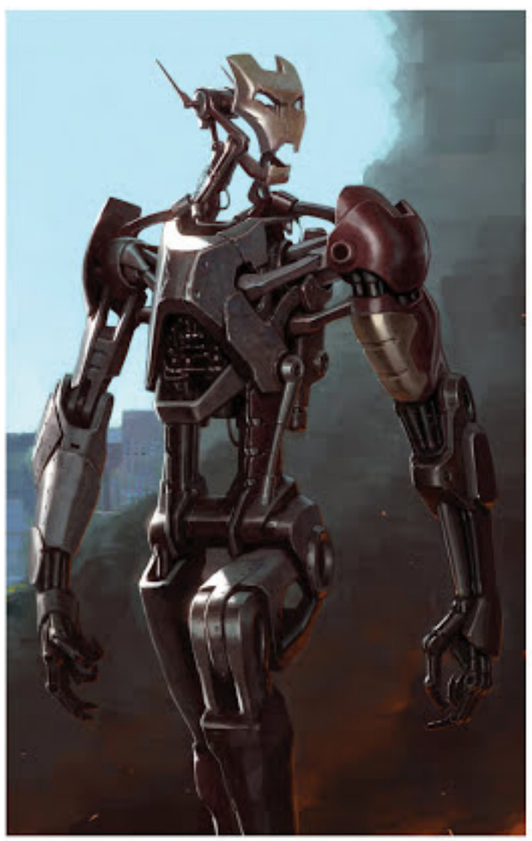
◂ AINSWORTH

FINAL PRODUCTION PROP ▸





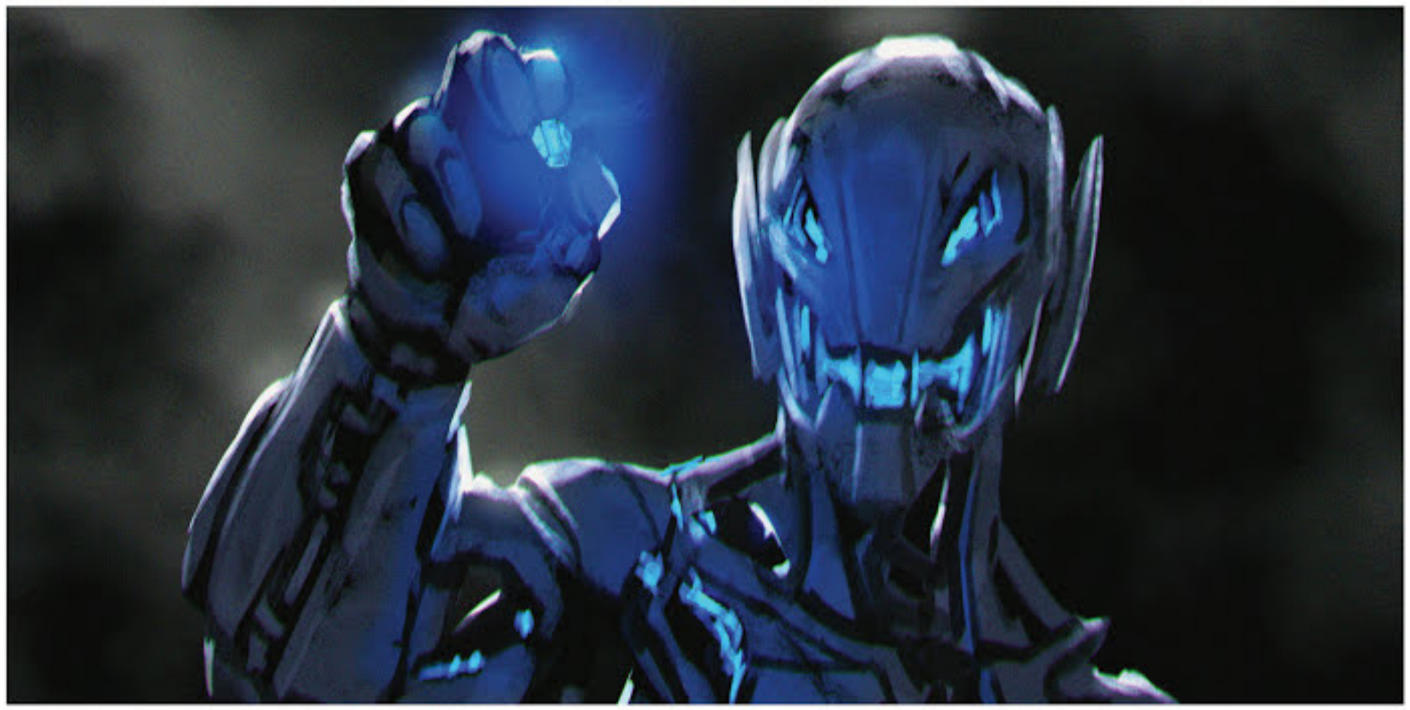
▲ TOP LEFT **ROSEWARNE**; TOP RIGHT **CASTRO** ▲ **PRODUCTION STILL**



WEN ▲

WEN ▲

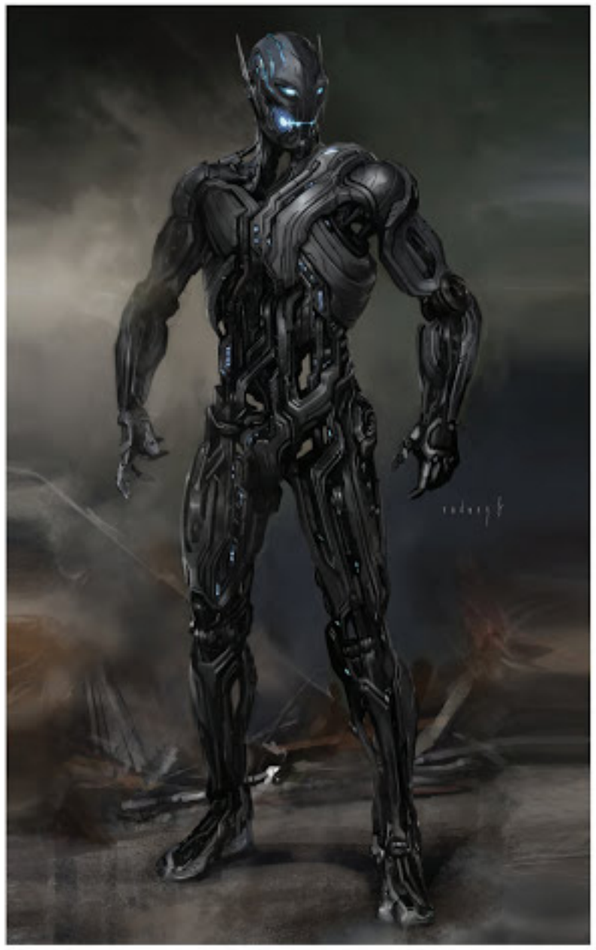
PARK ▲ TOP PARK ▲



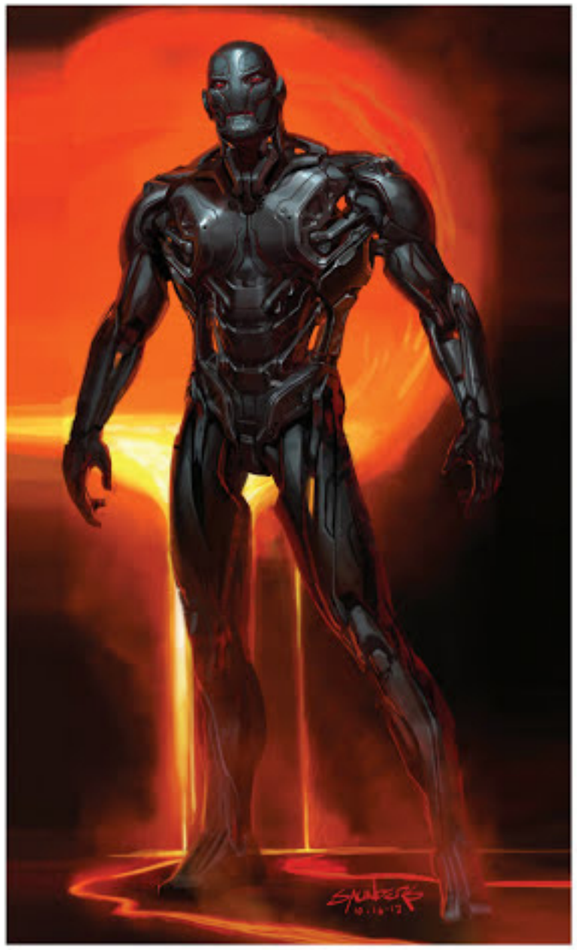
In an early draft of *Avengers: Age of Ultron*, the film's titular villain experienced difficulty obtaining the Mind Stone. "The sub-Ultrons were ordered by Ultron Prime to retrieve Loki's scepter," Andy Park says. "Later, as they try to reveal the Stone inside, the whole thing explodes. They all make their sacrifices and die except for one."

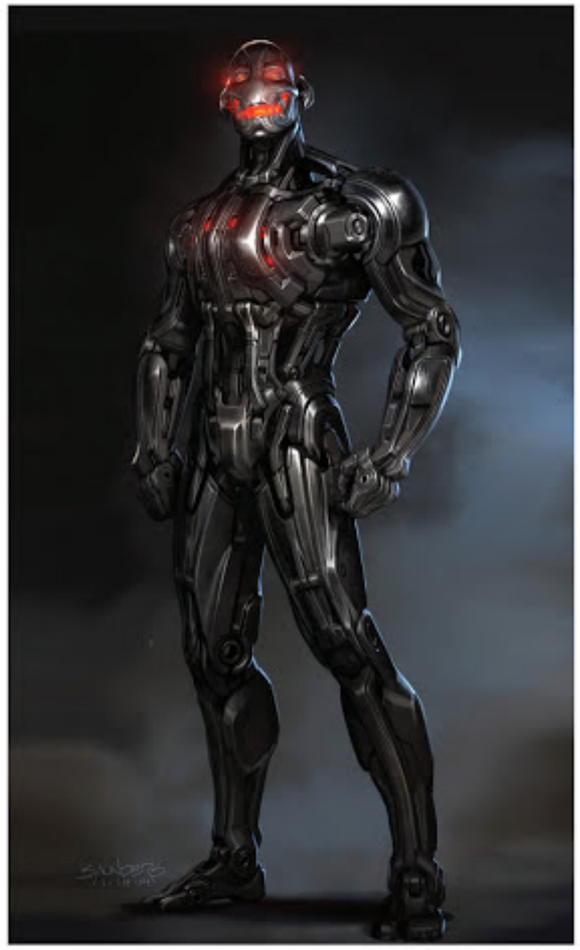
▲ TOP **PARK**

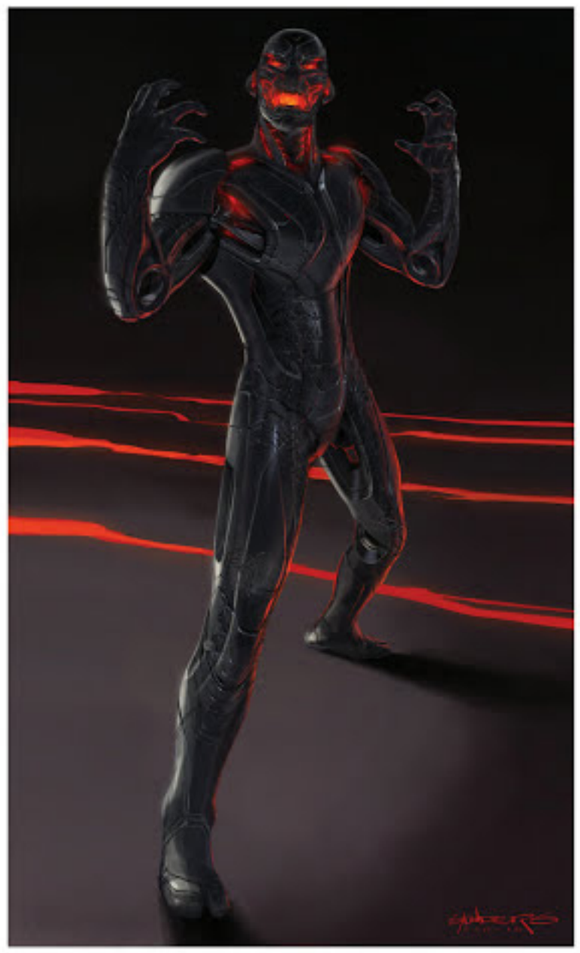
▲ **PRODUCTION STILL**



TOP **FUENTEBELLA**; BOTTOM **PARK** ▲

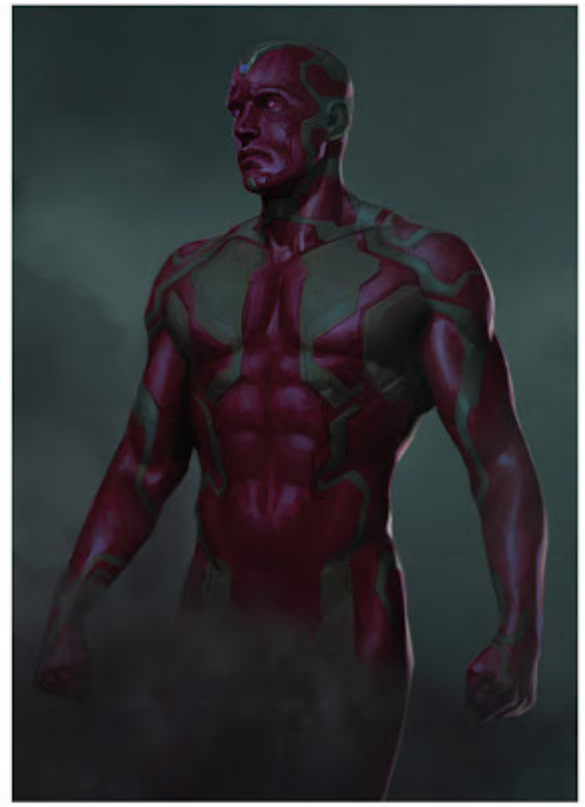


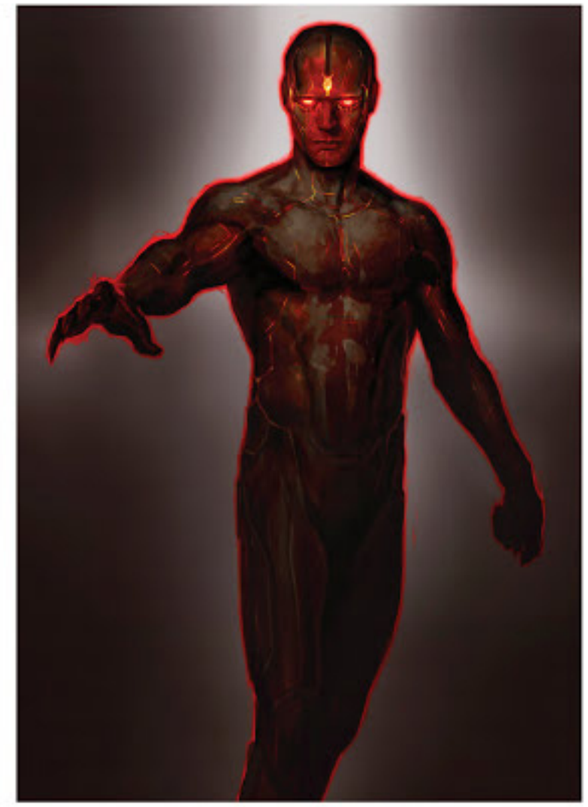


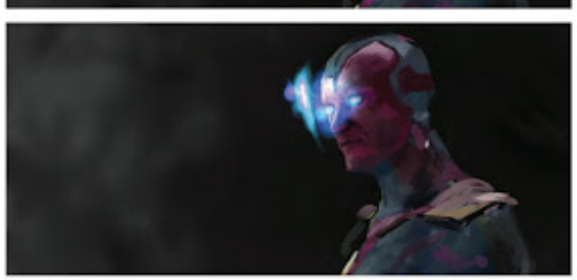


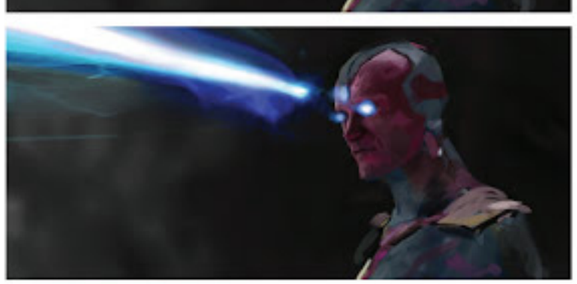
◀ WEN ▲ SAUNDERS

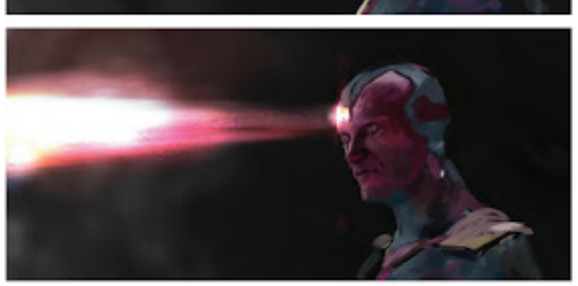
MEINERDING ▶

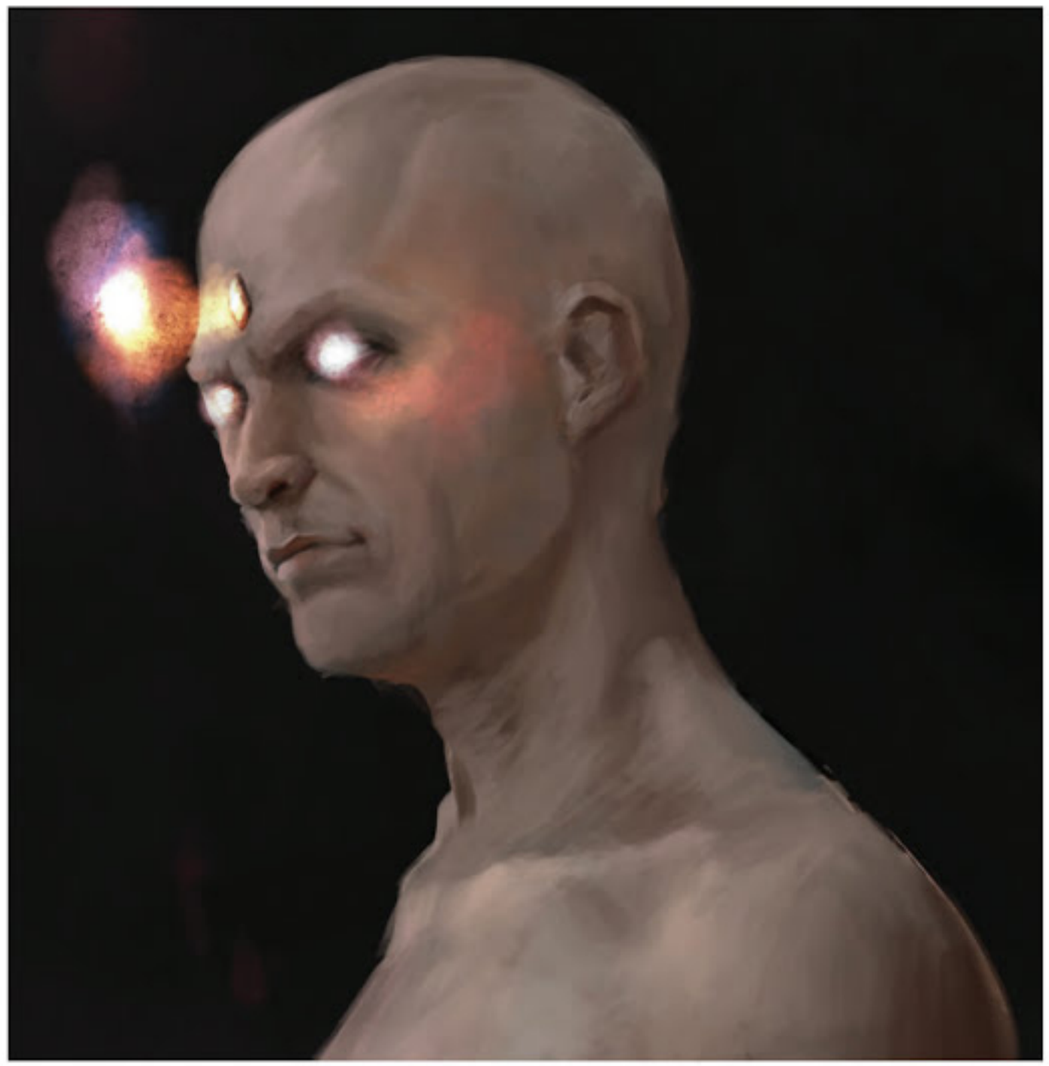












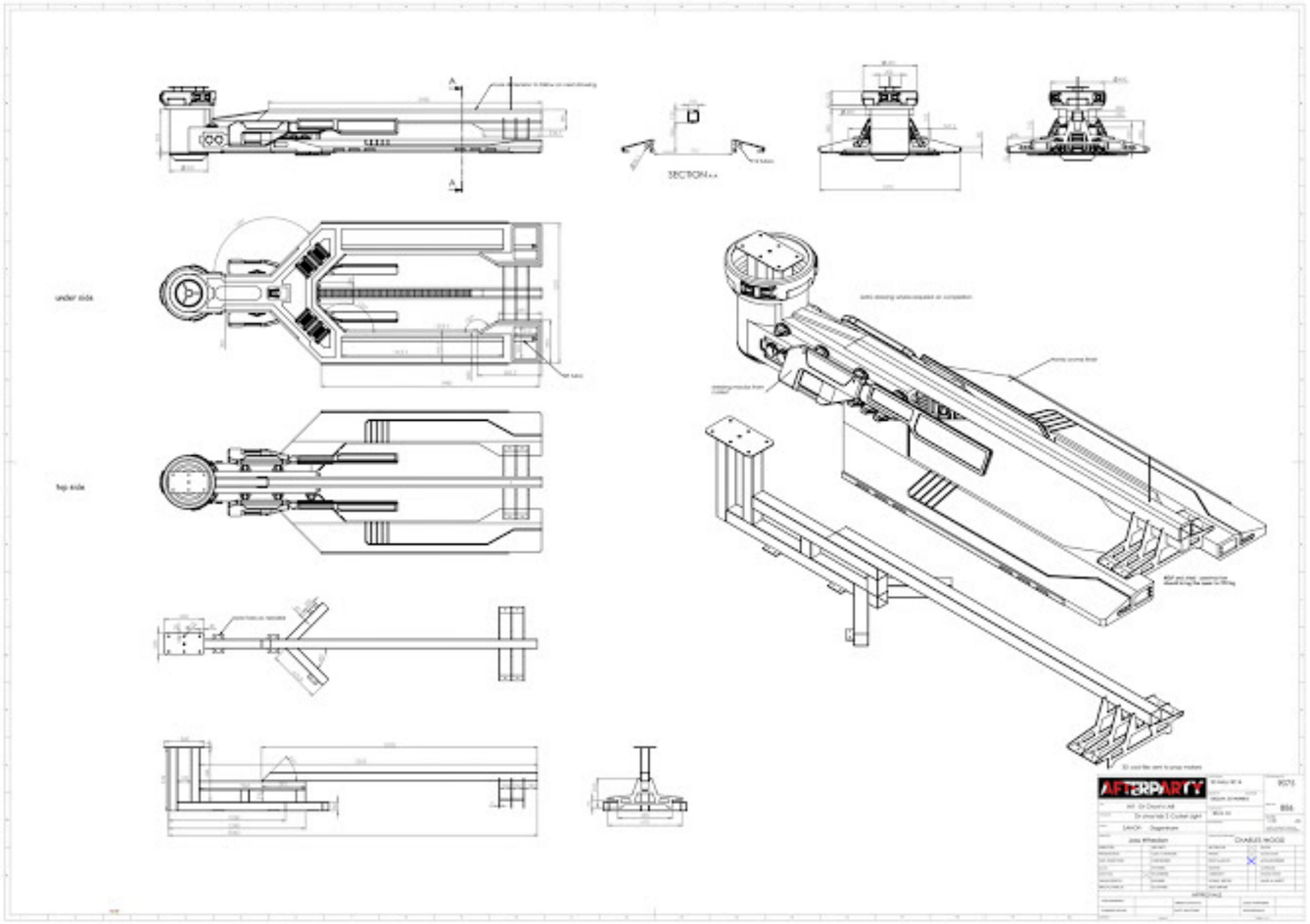
One of the more challenging aspects of designing the Vision was incorporating the Mind Stone. "I actually started with the blue Stone, because it was actually a blue Stone on Loki's staff," Ryan Meinerding says. "Initially, we were trying to figure out how that Stone was going to go onto Vision's head. That Stone is large. I mean, it's a little bigger than an egg. So, I was trying to figure out how you could embed something like that into a head and not have it feel weak or strange. When the decision was made that there was something inside the Stone, and it was going to be a different color, and it ended up becoming something that was much smaller, it got a lot easier.

"Vision has a lot of lines on his face that sweep his brows upward, which does two things: It makes him seem sympathetic, but it also directs your eye back up to the Stone. And then there's other lines that surround the Stone. So a lot of his design was really finding the lines to make the Stone important, and then baking the empathetic lines into it as well, so he becomes a sympathetic/empathetic character despite having a multicolored face."

FUENTEBELLA ▲

FUENTEBELLA ▲ TOP LEFT & MIDDLE MEINERDING ▲

PARK ▲ MEINERDING ▶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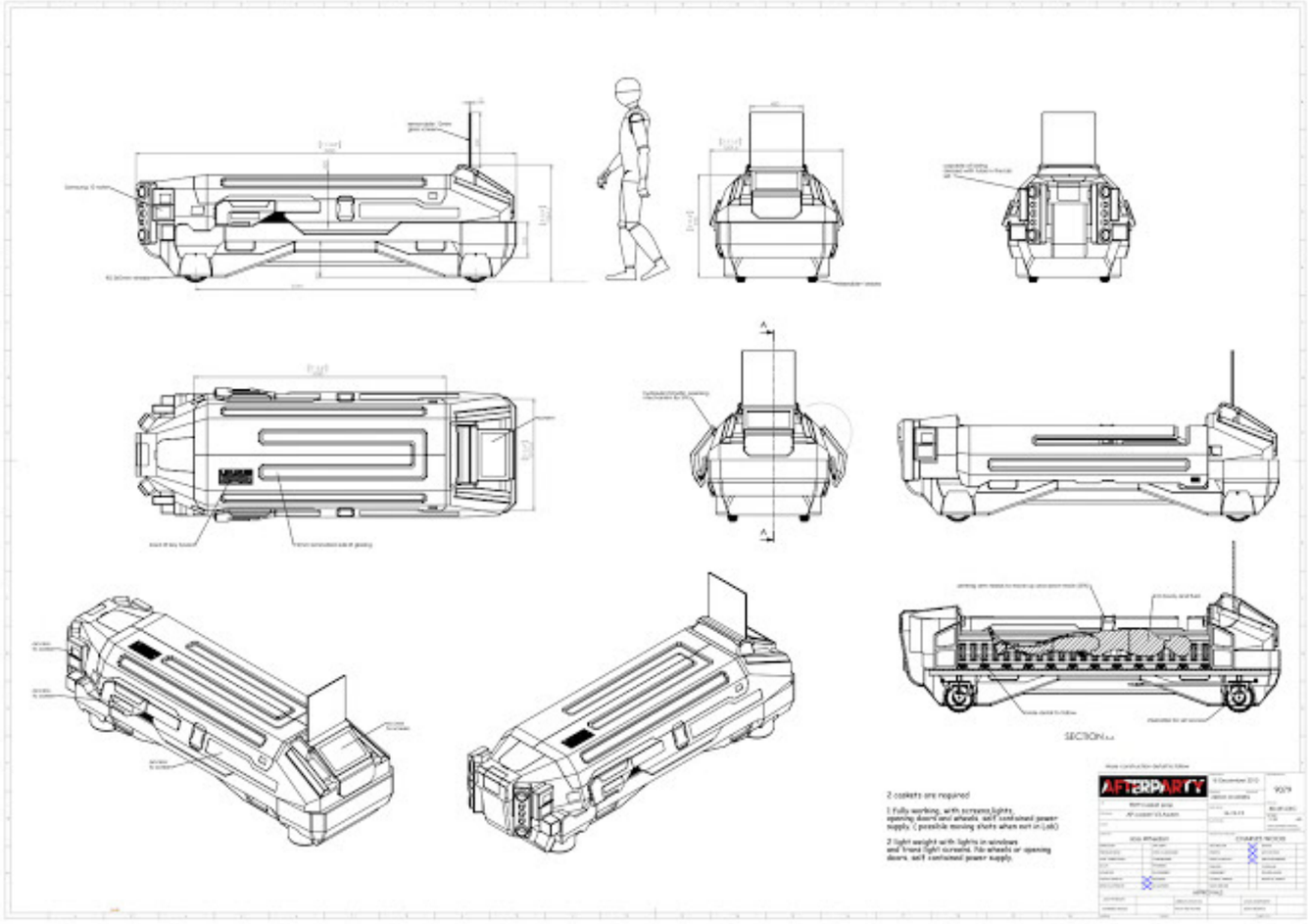
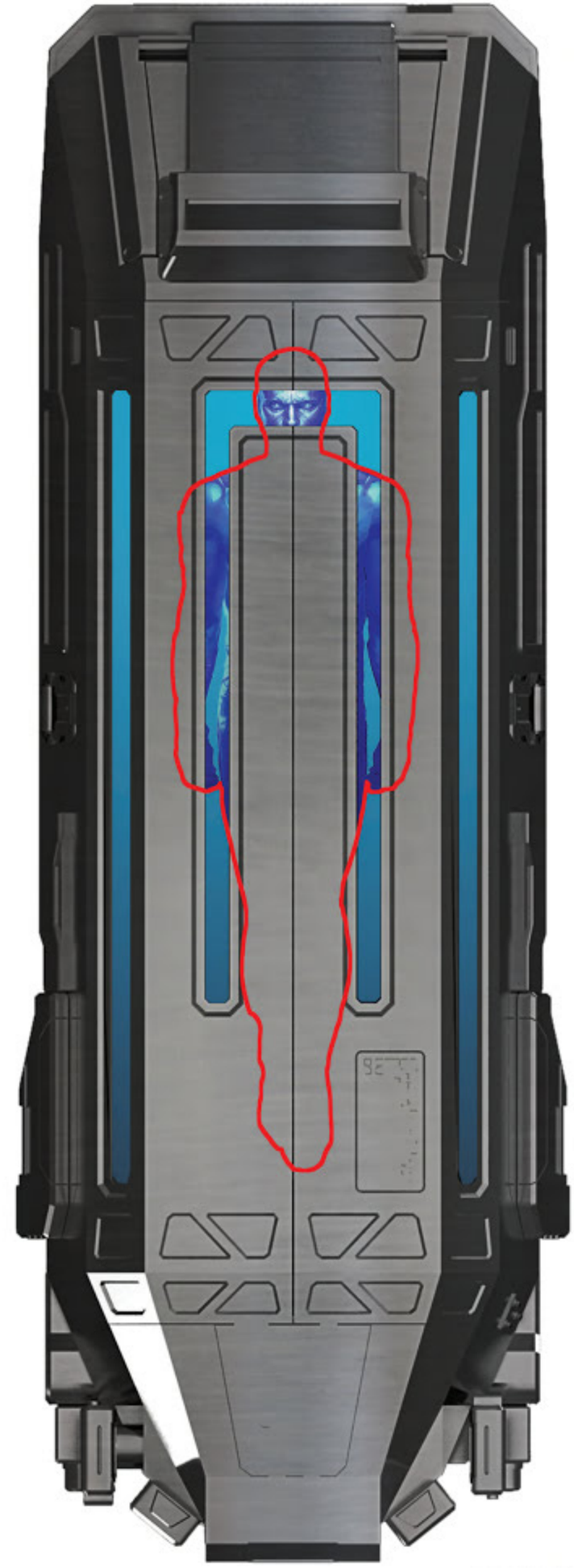
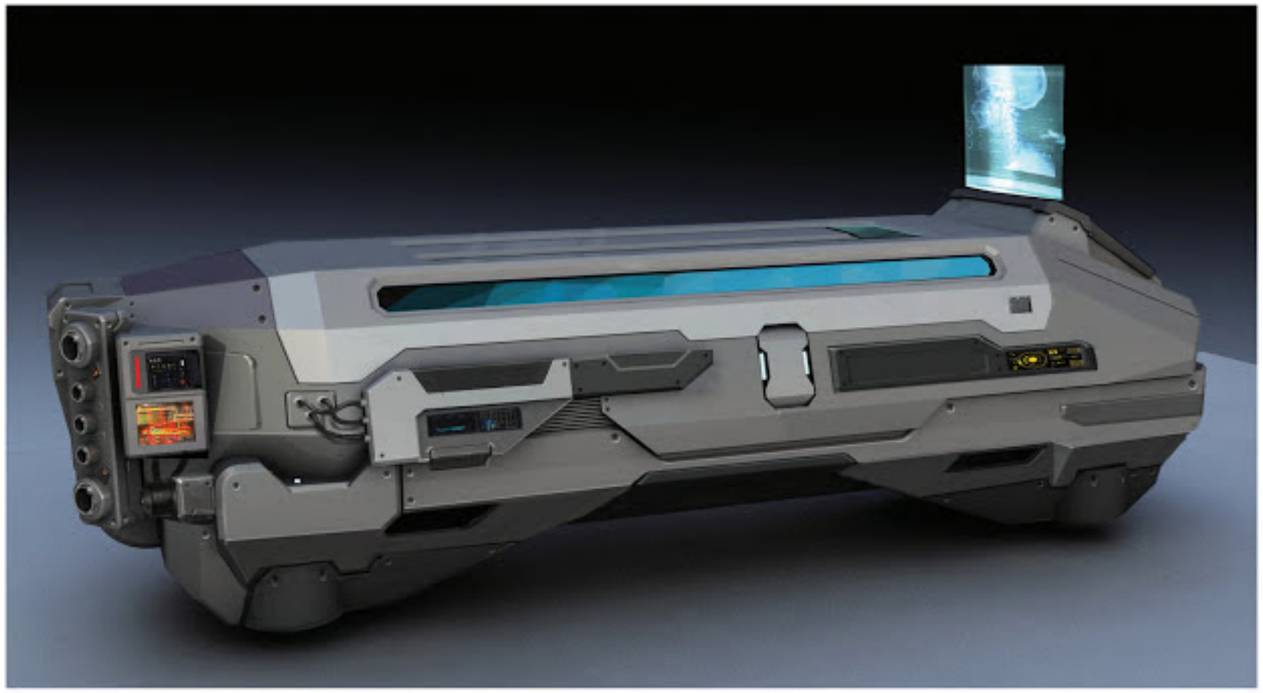
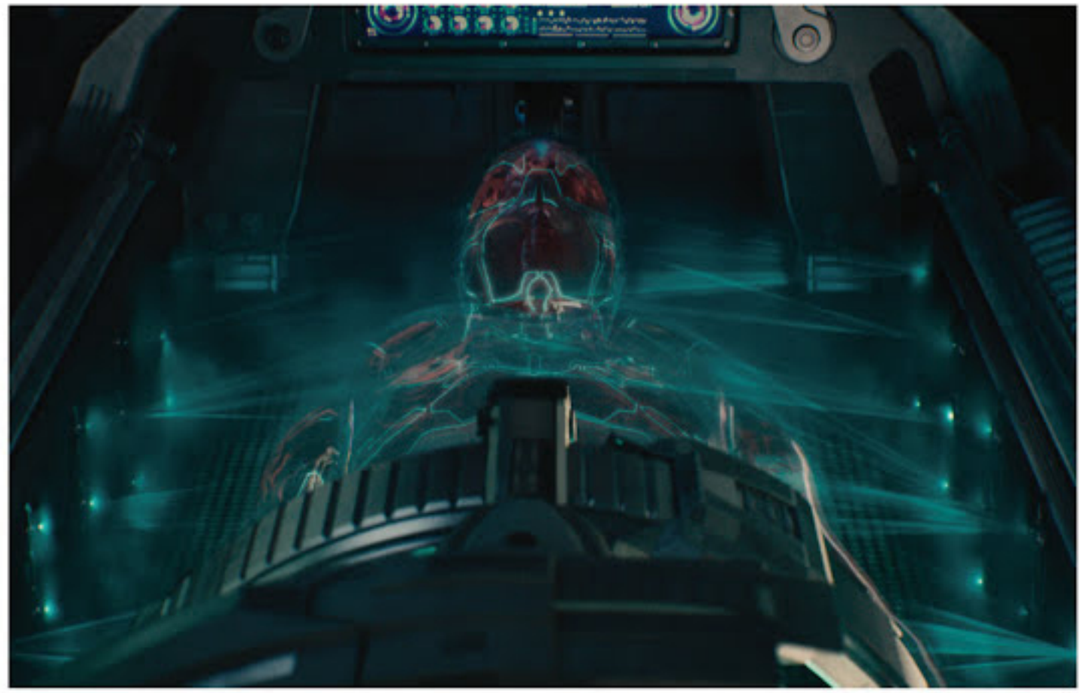
under side
top side
AFTERPARTY
9075
Joss Whedon
CHARLES WOOD


SECTION
AFTERPARTY
9079
2 caskets are required
1 fully working, with screens, lights, opening doors and wheels, self contained power supply. (possible moving shots when not in Lab)
2 light weight with lights in windows and front light screens. No wheels or opening doors, self contained power supply.







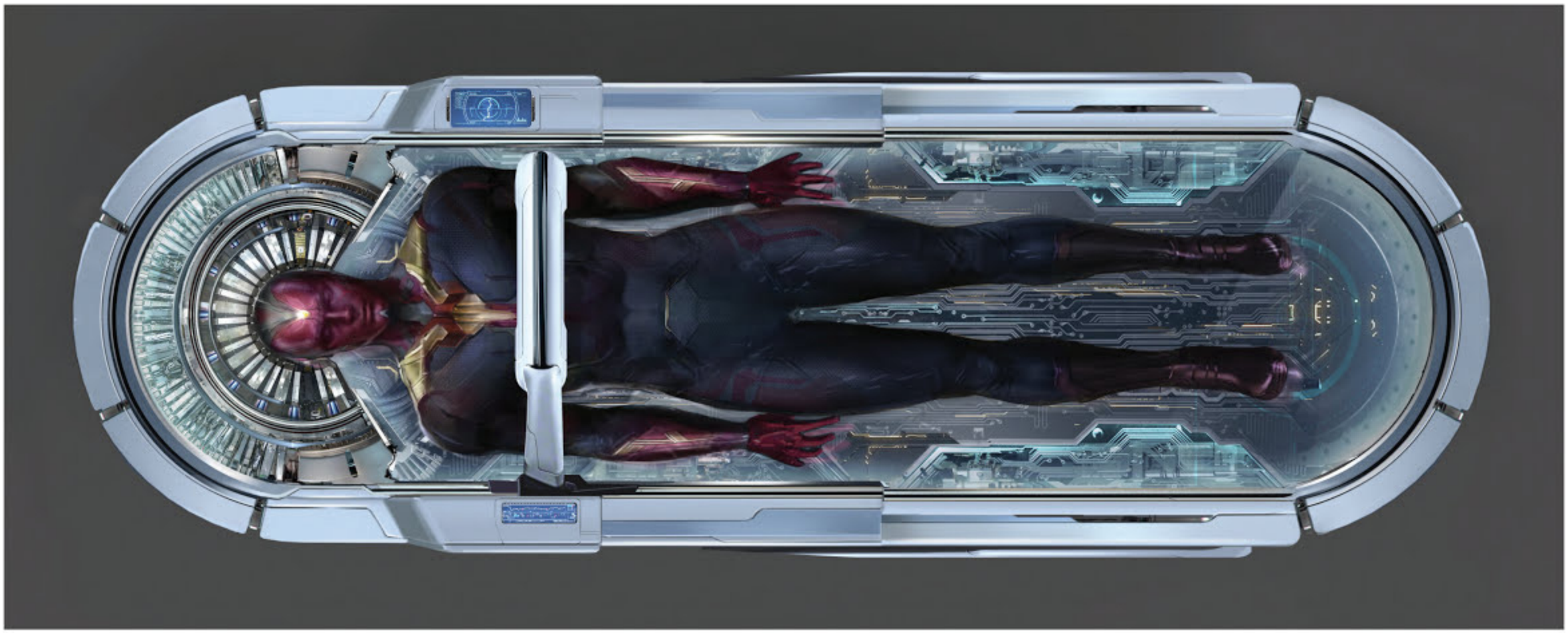
Ever-evolving and constantly perfecting himself, Ultron created a synthetic body powered by the Mind Stone to which to upload his consciousness. "This was a carriage for him in the sense that it would keep all his body systems alive and in flux and also protect him and keep him safe," Charles Wood says of the regeneration cradle. "The whole idea is this had to actually work with a storyline in which it was at the back of the truck in Seoul, and basically was a life support/transportation unit. Within Avengers Tower, it becomes a way of revealing Vision to the audience for the first time and just getting little hints of him through the glass. When you see those little slits of glass, the idea was that you didn't quite know what was inside until we chose to reveal it—but you knew there was something in there. We were building a sense of anticipation into it."

▲ TOP LEFT **CATLING**; TOP RIGHT **PRODUCTION STILL** ▲ **PRODUCTION STILL**

"I don't think Vision's design would have worked as well as it did if Ultron had actually uploaded into that body," Meinerding says. "Ultron's maniacal stuff works so well with Ultron's design, and Vision in the comics was always a character that was so sincere and empathetic and the straight man in every situation that everybody played against. It just becomes a harder thing to read."

PRODUCTION STILL ▲

WEN ▲ TOP MEINERDING ▲ TOP PARK; BOTTOM PRODUCTION STILL ▶

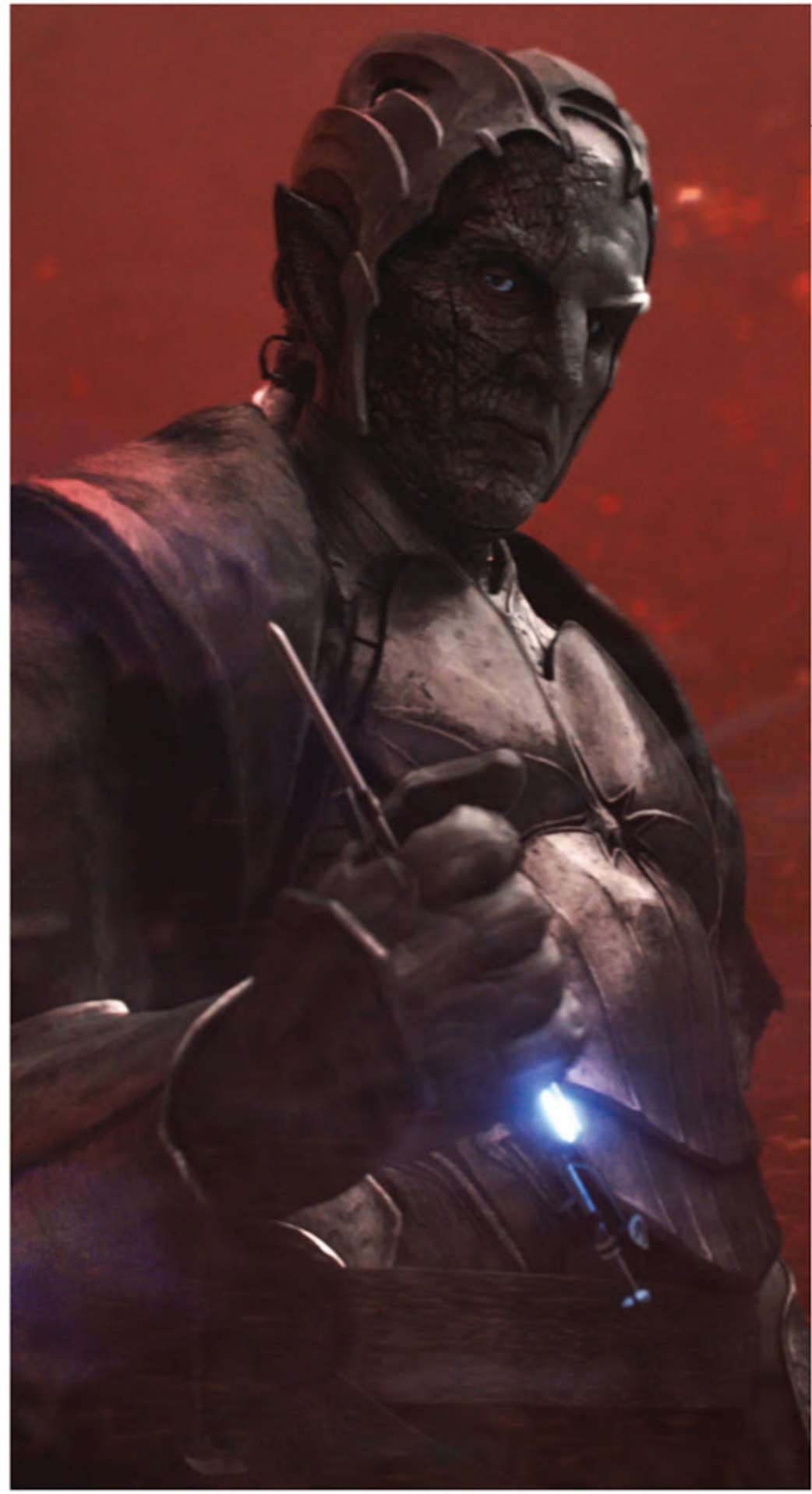


Knowing Thanos was coming for the Mind Stone, Shuri—the Black Panther's genius younger sister—devised a way to remove it from Vision's forehead without killing him. "This was simply a table that they could lay Vision onto," Wood says of Shuri's workstation. "There wasn't any reason why we needed to enclose him. We did a lot of design work around his head, all of these radiating metallic parts. There's almost like this headdress around his head. The area around his head was based on a piece of African jewelry."

PRODUCTION STILL ▲ TOP & BOTTOM RIGHT **THOMPSON** ▲ TOP **STAUB**, BOTTOM **PRODUCTION STILLS** ▶

"I did a couple of variations on ways that the Stone could be pulled out," Meinerding says. "Destroying some part of his head to be able to get the Stone was definitely part of the equation. I think doing a gray version was a distinct choice to make him not look like the other version of him from the comics. There are designs in the comics where Vision is white where he's fully powered and alive. What they ended up with in the movie is actually more of a gray. I think desaturating him and saying that's what lifeless is for an android is a pretty successful thing."

TOP STAUB ▲ PRODUCTION STILL ▲ MEINERDING ▶



◀ WEN

PRODUCTION STILL ▶

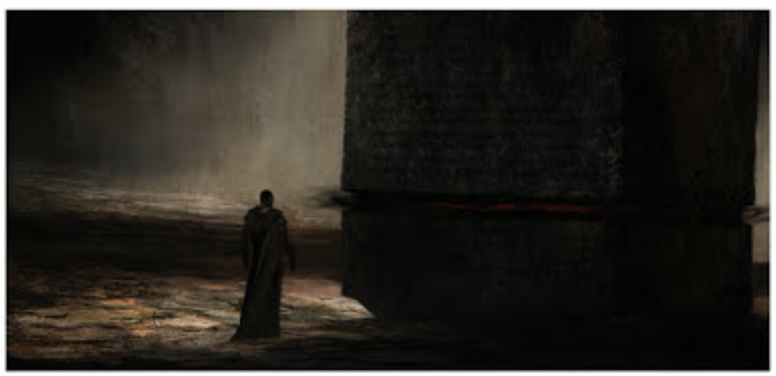
REALITY

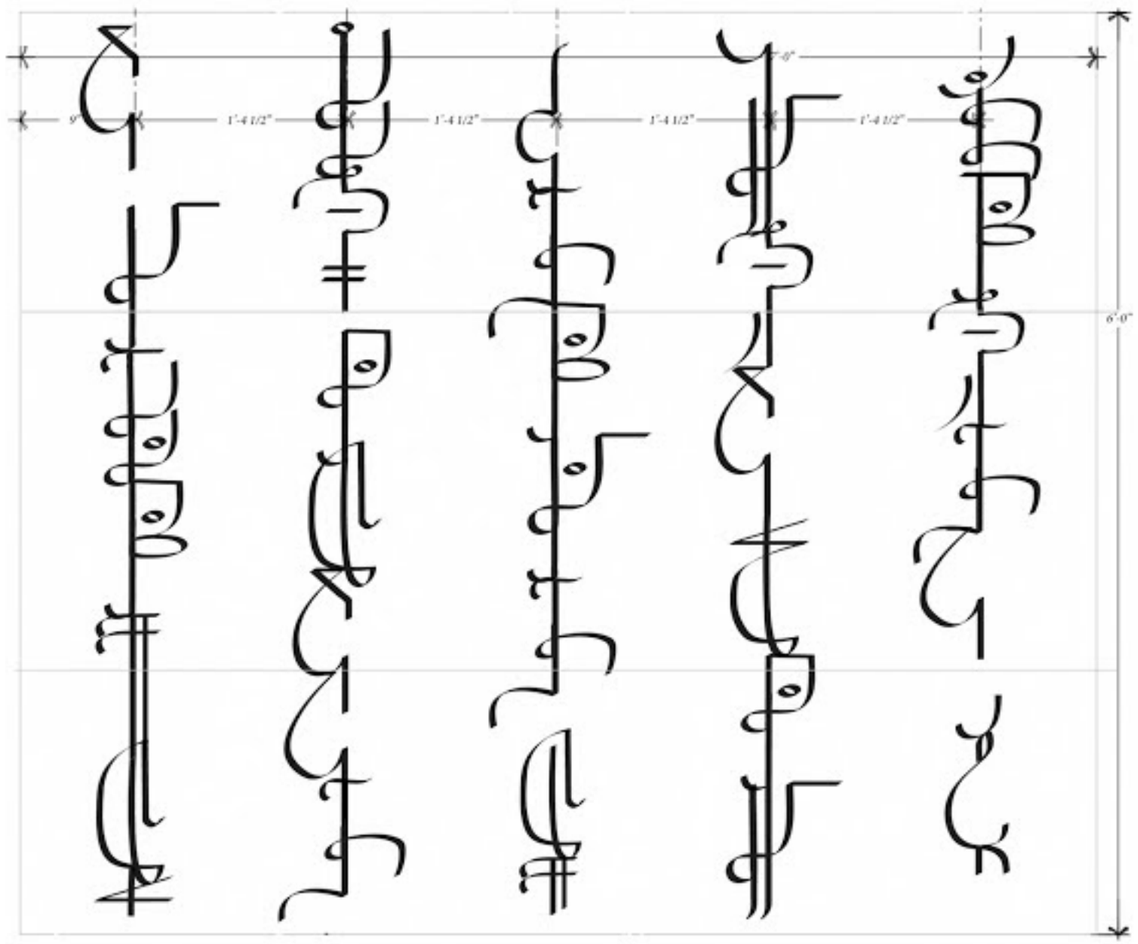
A E T H E R

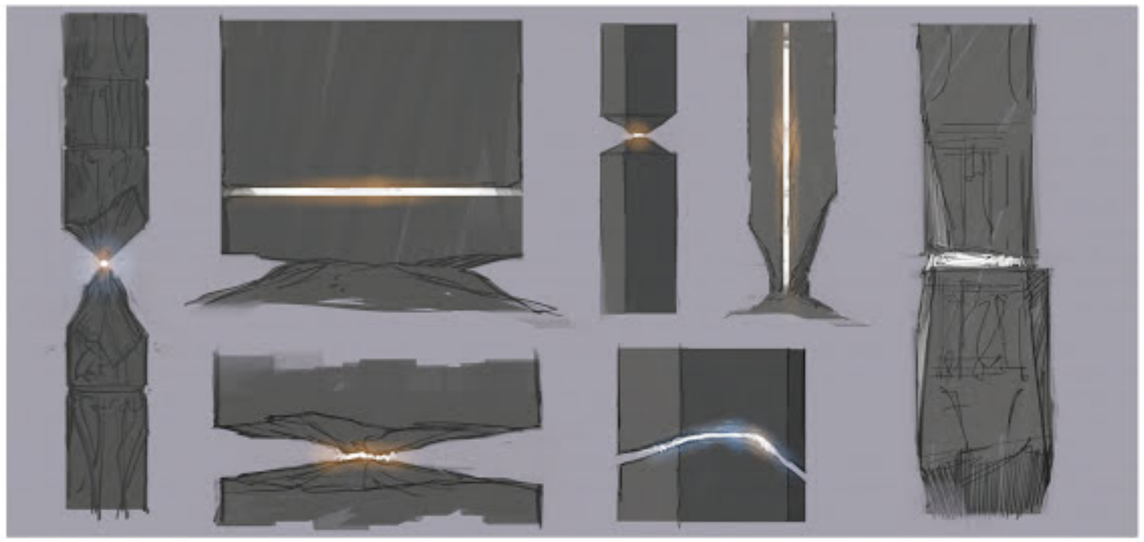
The Reality Stone—formed from the Aether—is capable of transforming matter. To prevent the Dark Elves from using the Aether to plunge the universe in eternal darkness, the Asgardian Bor—Thor's grandfather—hid it away on a distant planet.

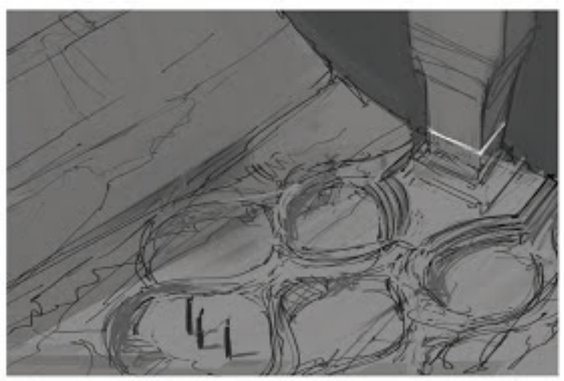
▲ PRODUCTION STILLS

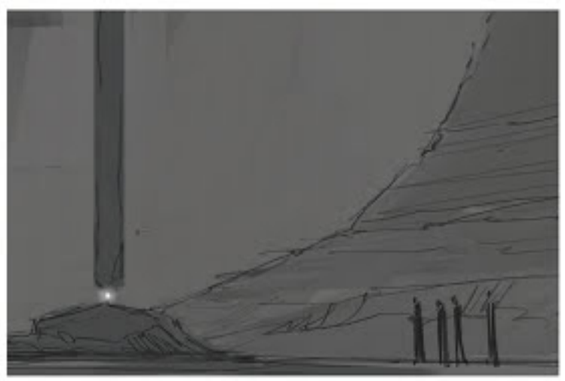
▲ TOP RIGHT **FAIERS**



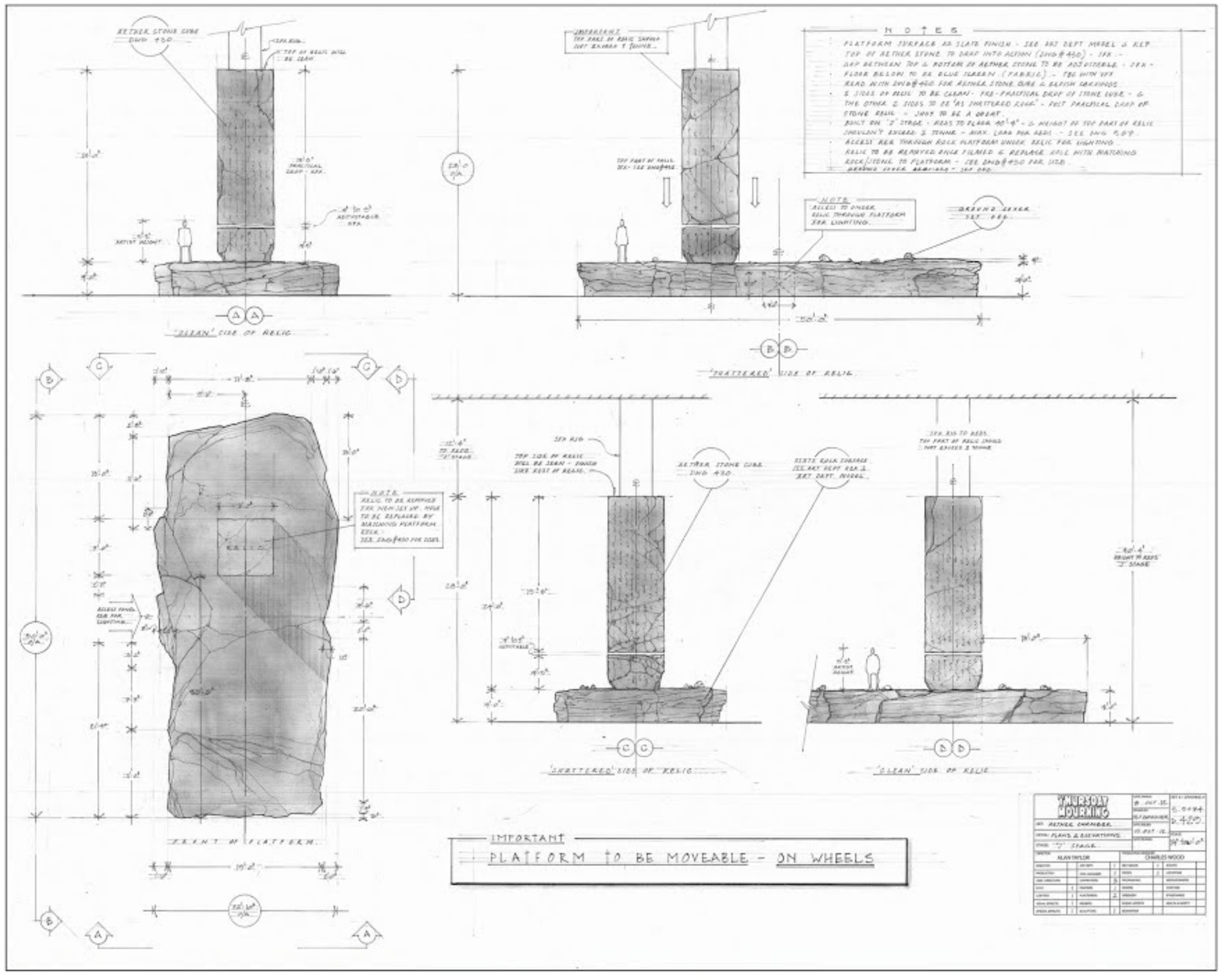






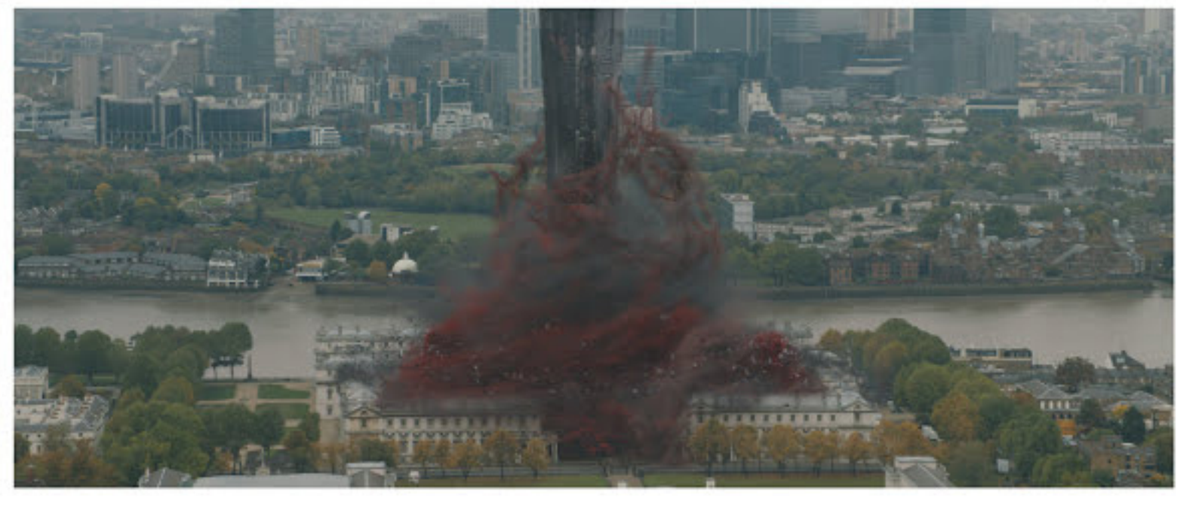


"The monolithic rock was supposed to be more of a phantom," Charles Wood says of the strange stone housing the Aether. "This was a much more frightening, abstract world where this energy was kept, and it's incredibly dangerous. This was a much more primeval and primal sort of world. It was part of a nightmarish dream. It is the hardest material we could come up with, which was almost like obsidian. It was just all very suggestive with just with the tiniest bit of light—quite a different way of housing such a danger."



GOODIER ▶

▲ PRODUCTION STILL



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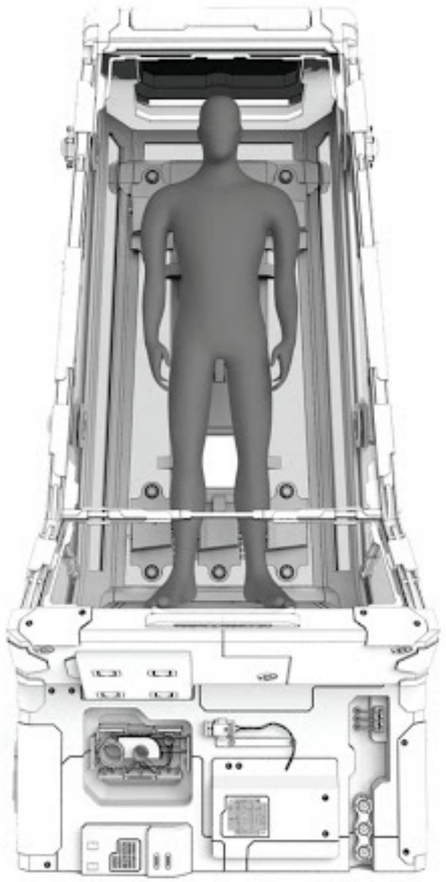
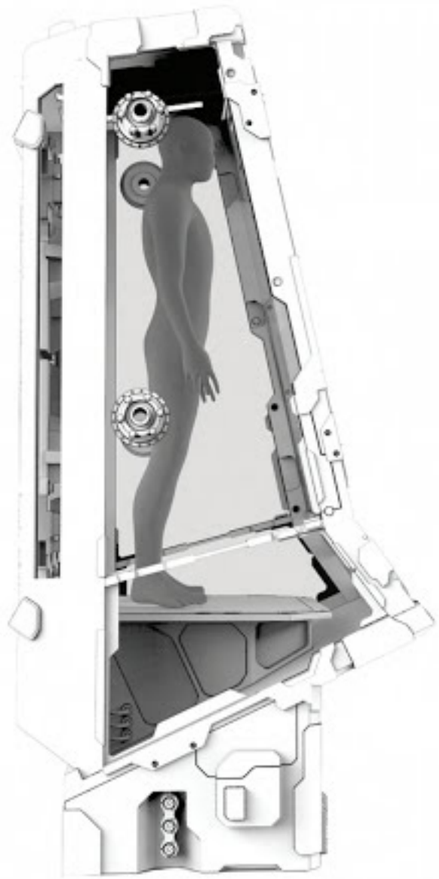
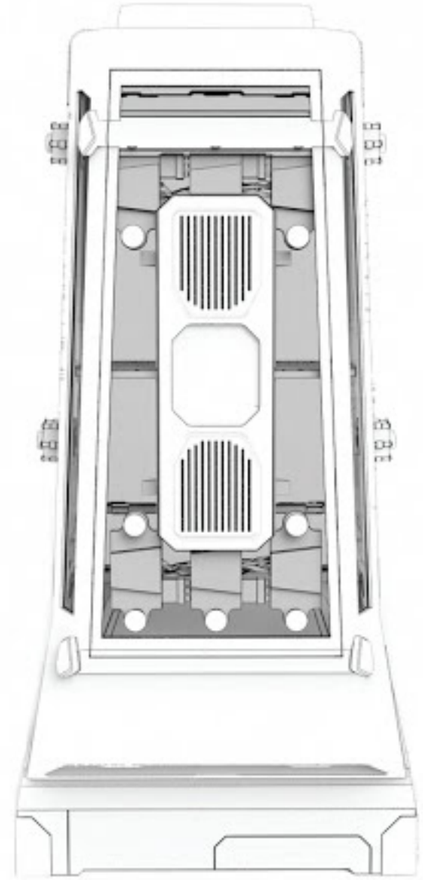
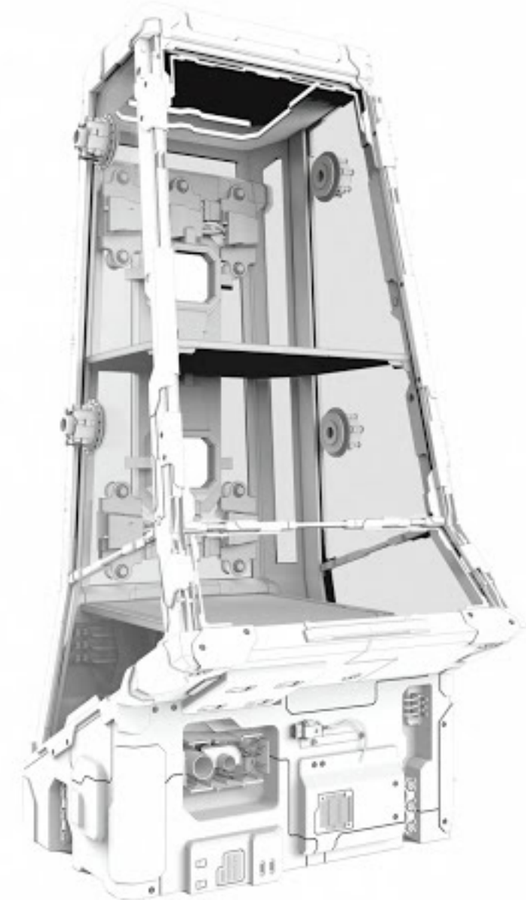








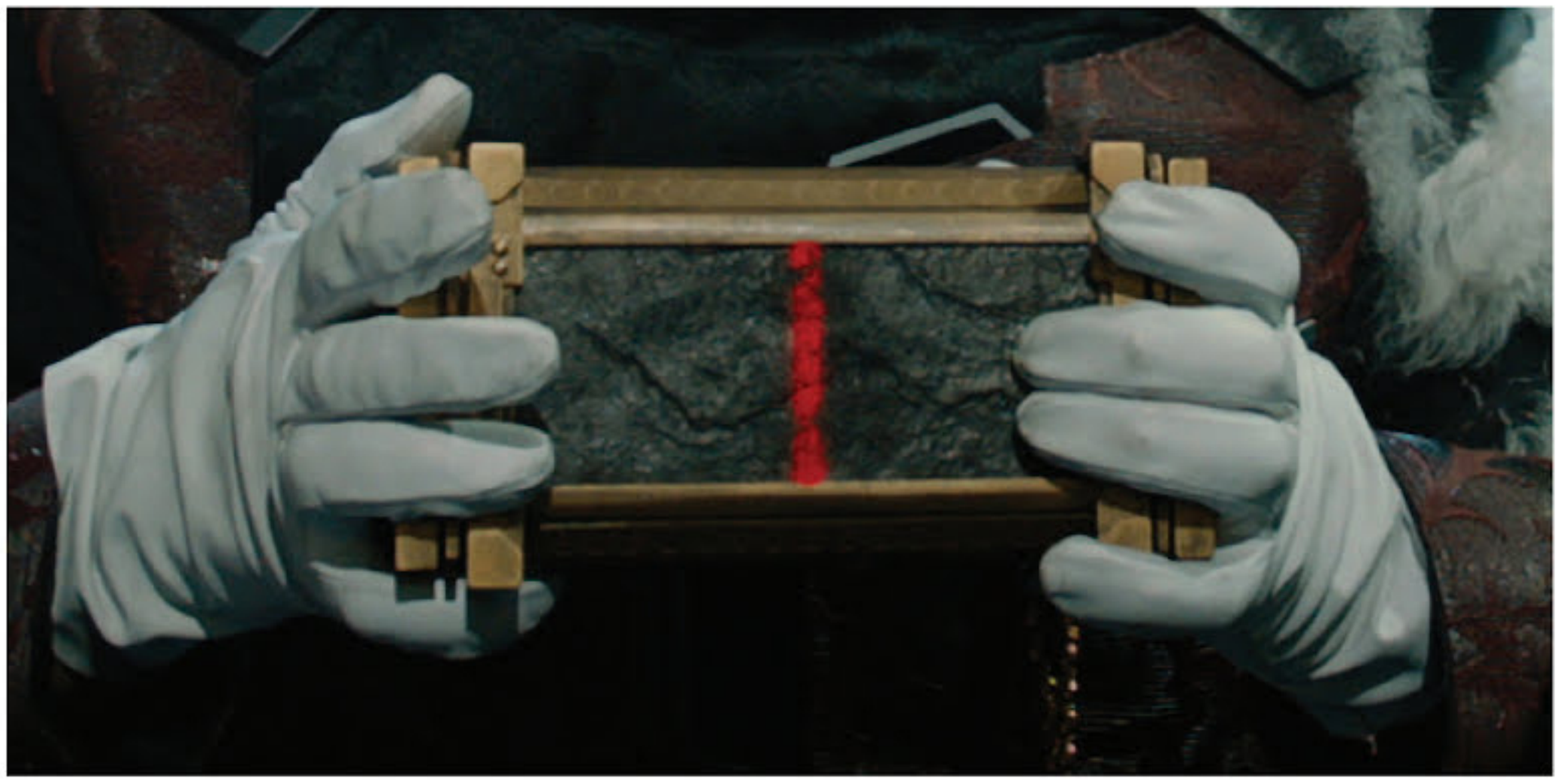
CROSHAW ▲

CROSHAW ▲

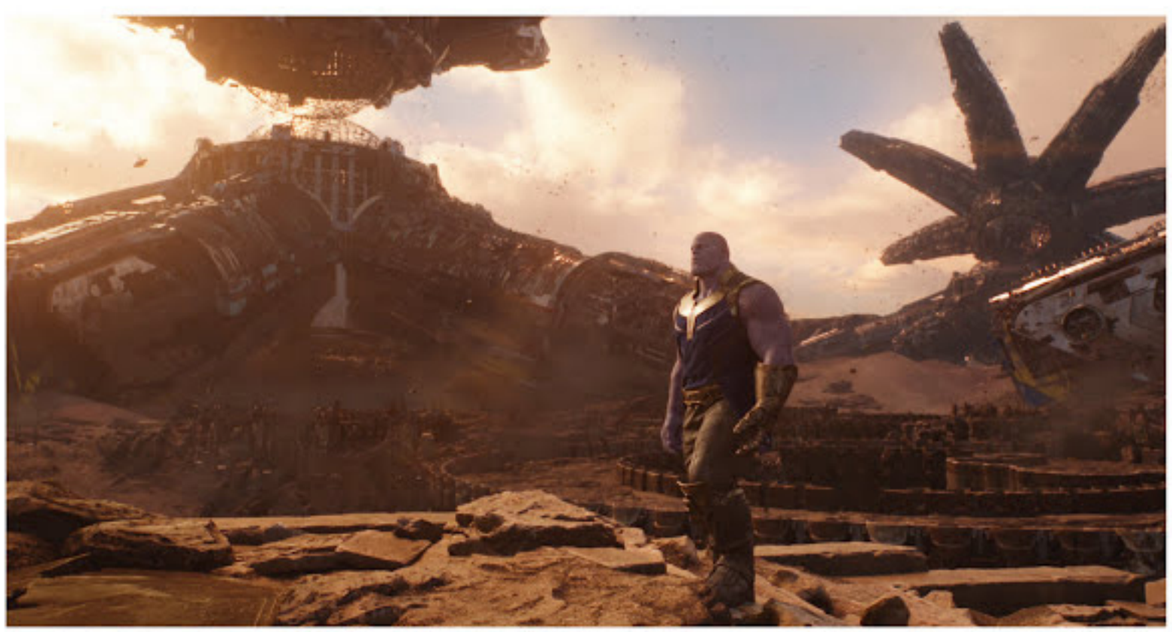
In order to ensure the Aether is secure, Asgardians Sif and Volstagg entrust it to Taneleer Tivan—the Collector—for safekeeping on Knowhere. The Reality Stone becomes one piece in a much larger collection of oddities, artifacts, and beings gathered from all corners of the universe.

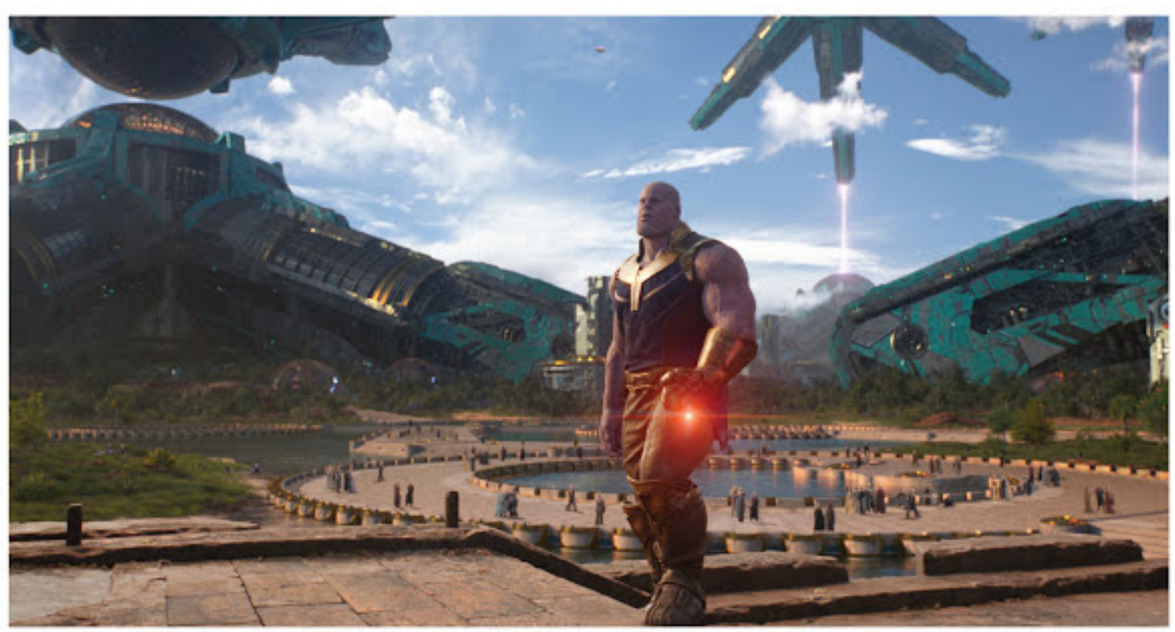
"The cases were all about his collection," Charles Wood says. "We were trying to come up with designs by which you could understand this crazy character of the Collector, and see his menagerie and find all these specimens—whether they're plant or animal or creature. We came up with this system so that the camera could move in and around and amongst these glass cages. It was really a way of trying to find the best possible way of showing his collection to a moving camera. Each case had a different design depending on whether it needed to support life or not, or whether whatever was inside it was dangerous or not."

TOR POUGNIER ▲



▲ TOP **PRODUCTION STILLS** ▲ **THOMPSON**

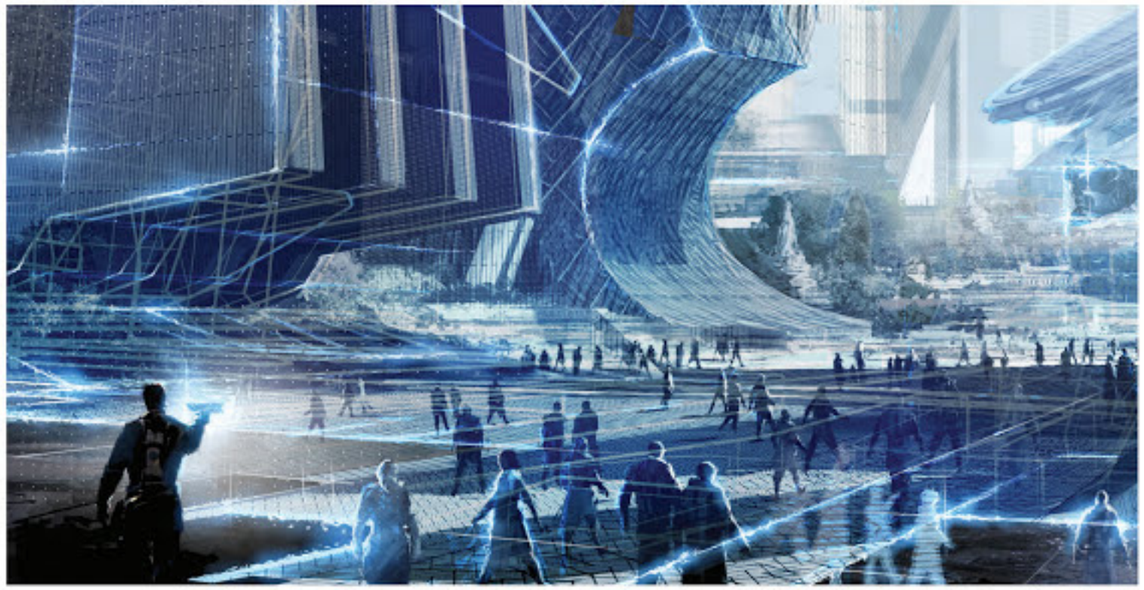




POWER

THE ORB

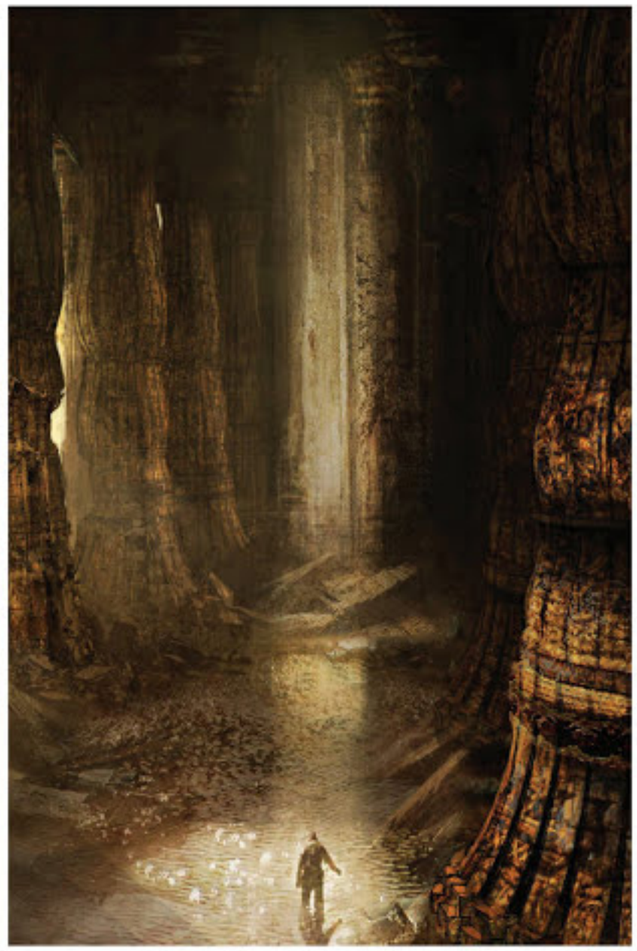
The Power Stone grants the ability to annihilate entire civilizations. Star-Lord unwittingly uncovered the purple Stone on the planet Morag, the once-oceanic home of an ancient civilization long since destroyed. "It was like the world of Atlantis without water," Charles Wood says. "So all of the water had drained away, revealing these extraordinary coral reefs, or collections of things—plant material, etc.—that were completely over-scaled that would create this kind of very calcified, strange, crusty, lunar landscape that had a sense of fossilized biology to it. A lot of the inspiration was the White Desert in Egypt because it was once an ocean and it has all these beautiful, calcified structures."

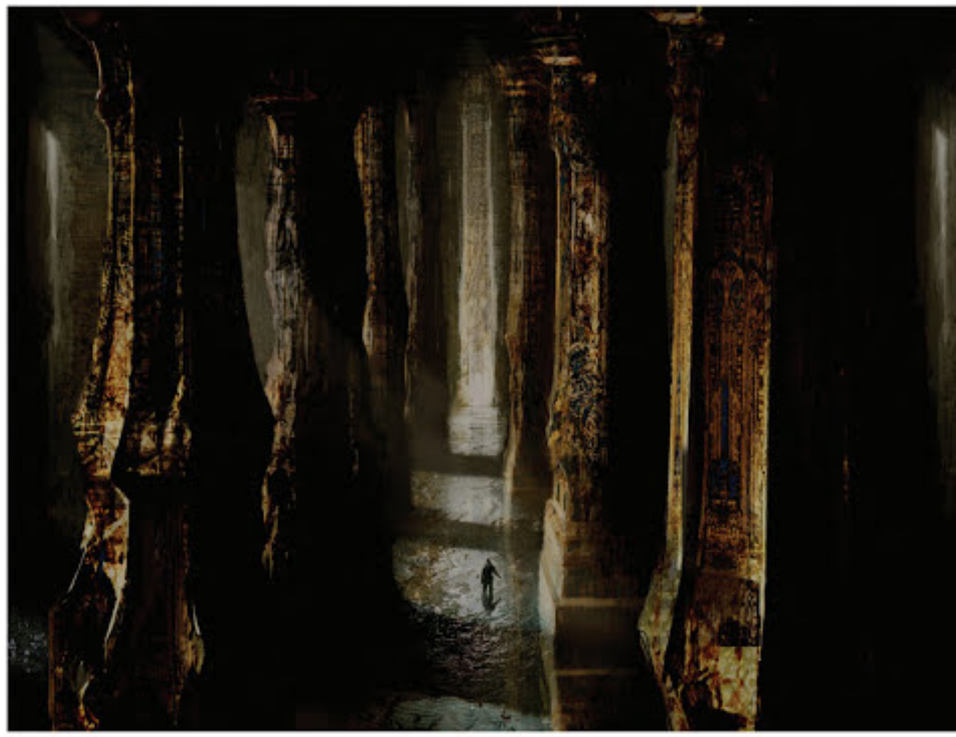


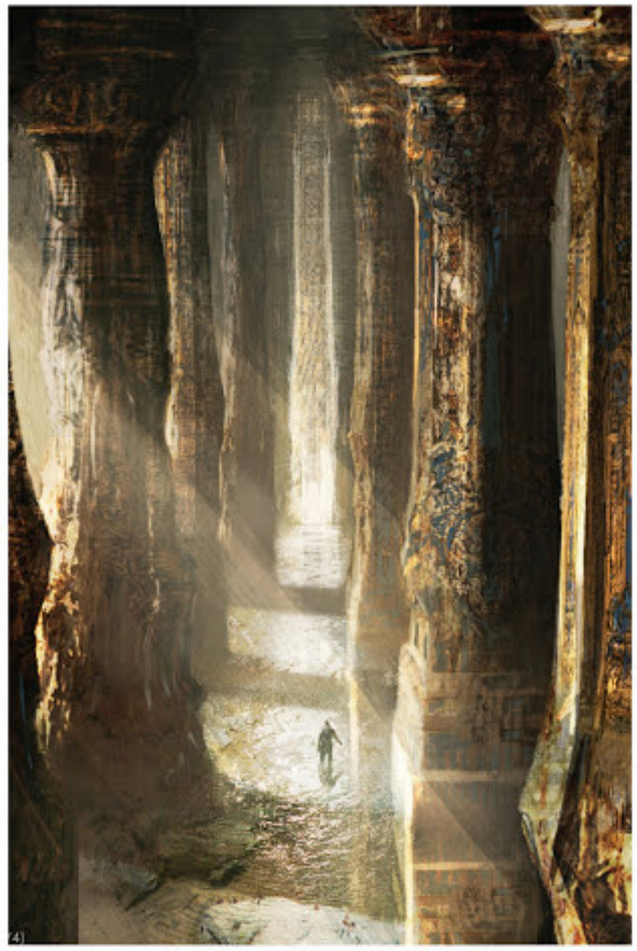
◀ JENKINS

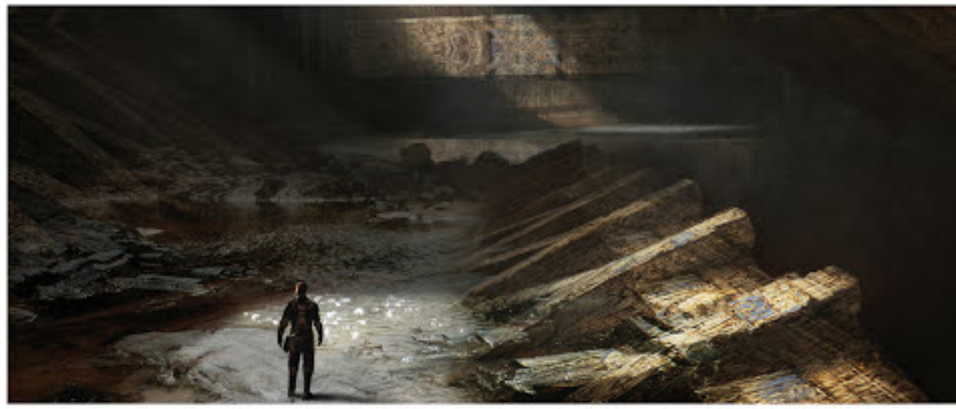
CHESHIRE ▲ · TOP CHESHIRE · BOTTOM JENKINS ▶

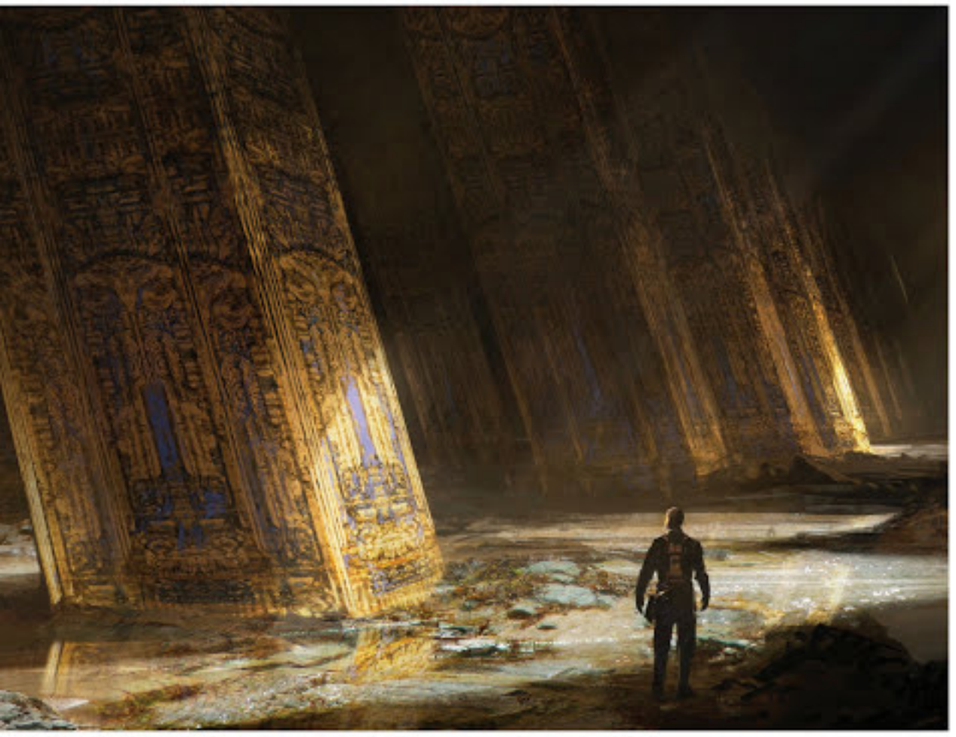
JACKSON JZG '12

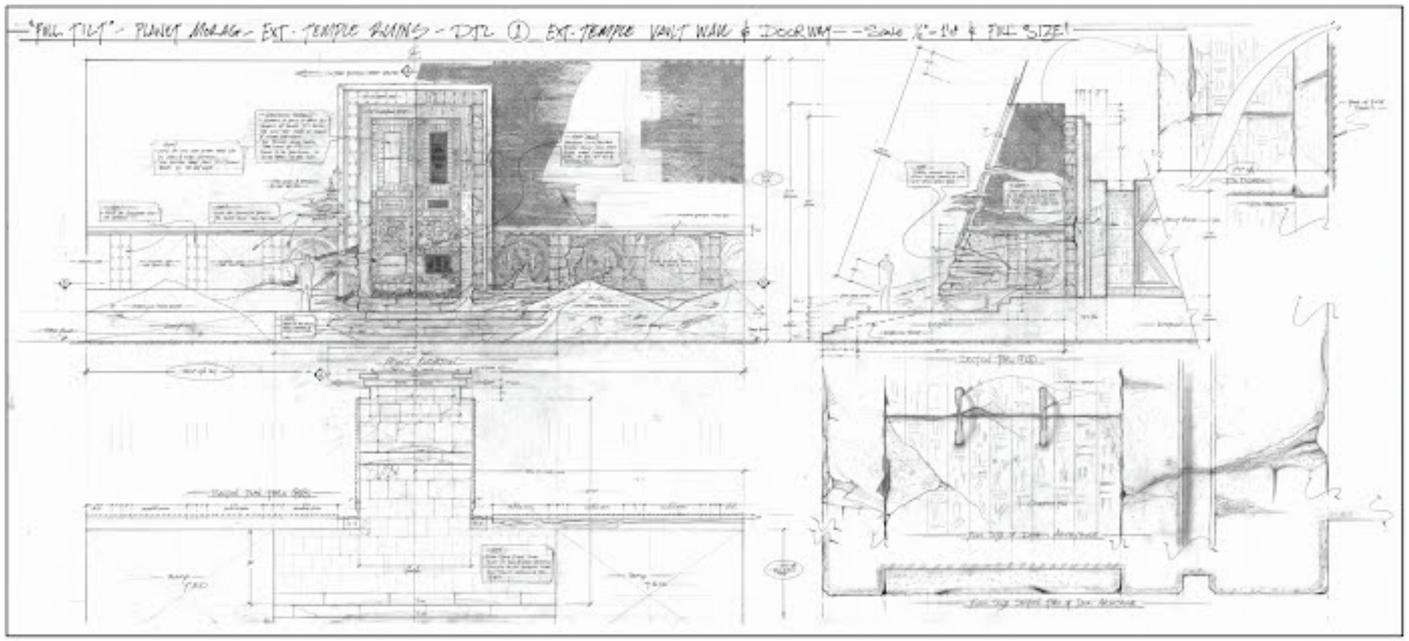


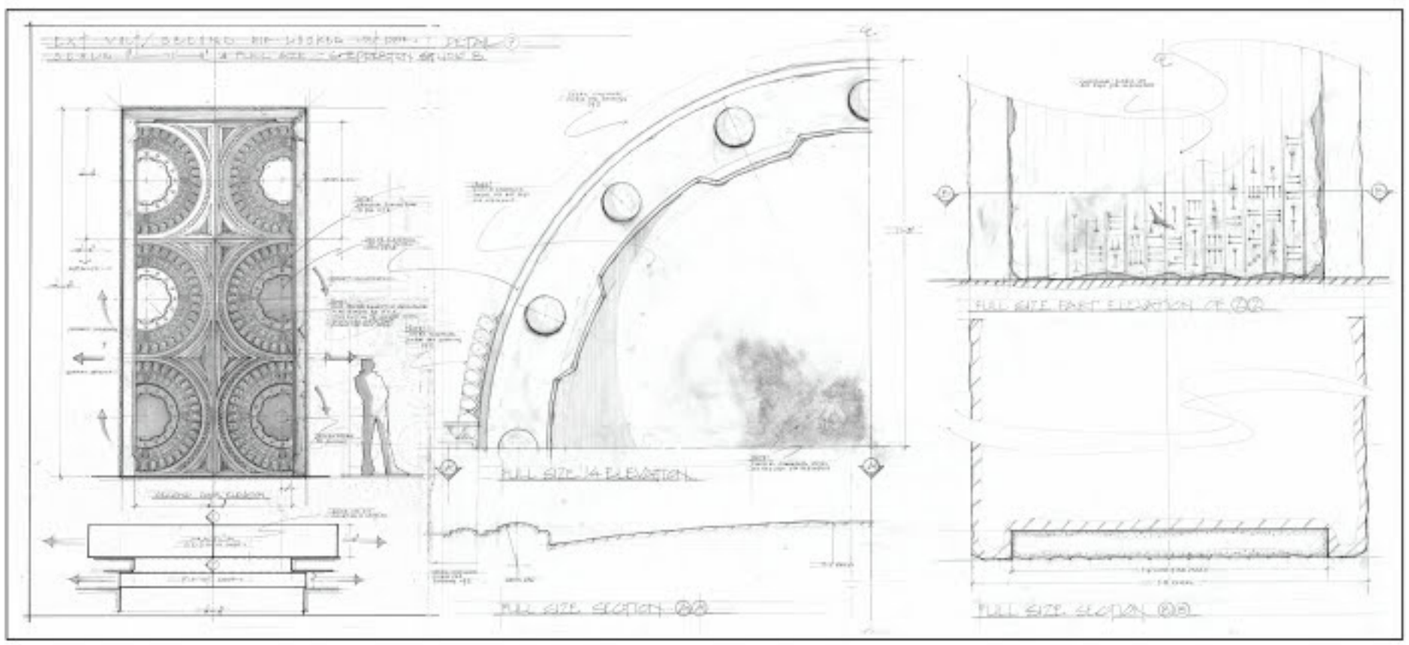








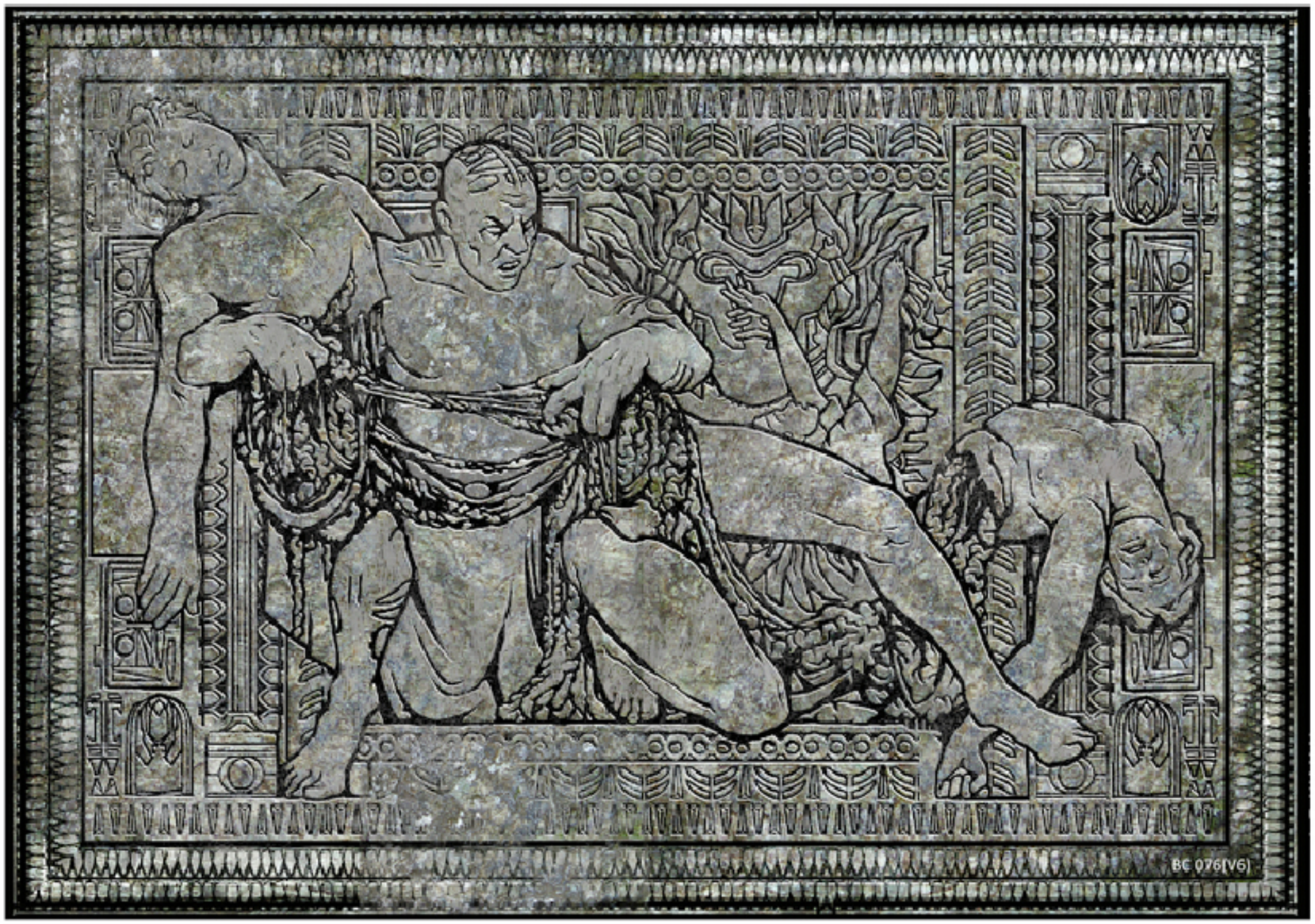




"For the interior of the temple, we looked at all sorts of spiritual places—whether they were from China, Indo-China, Cambodia, or India," Wood says. "That was the inspiration, sort of trying to create this very beautiful space with massive scale. It still had some remnants of an Earthly architecture, but in such a scale that it couldn't possibly be on our planet. The whole film was rooted in trying to create a world that had a past to it that had died. This temple itself was once underwater, and the waters have drained away. So it's just gave us this lovely way of looking at a sunken city."

▲ TOP **CARSON**; BOTTOM **CLOUGH**

▲ **PRODUCTION STILLS**

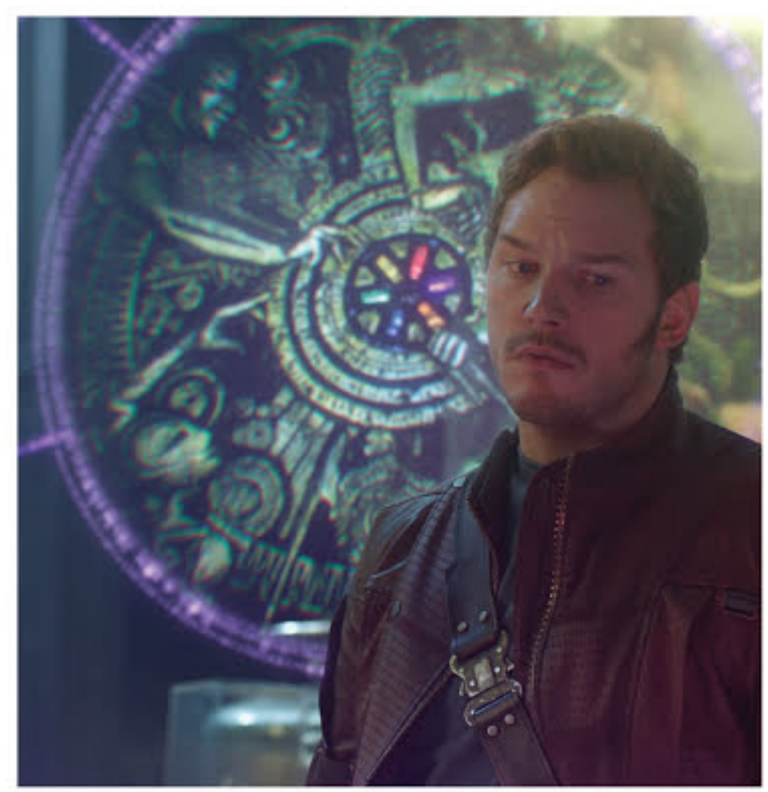


Upon closer examination, the panels and tiles in Morag's temple share the history of the Infinity Stones. "There's plaques," Wood says. "We came up with those big, wood, embossed wall pieces. If you were ever to come across it, it's this sort of warning from the past, as such, and in tablature. These went through many variations. It is best described in that piece of artwork on the top right [of page 65], that has all the science behind this, and what we were trying to say about what each Stone did."

▲ TOP **CHESHIRE**; MIDDLE **FINAL PRODUCTION PROP**; BOTTOM **IN-PROGRESS PRODUCTION PROP**

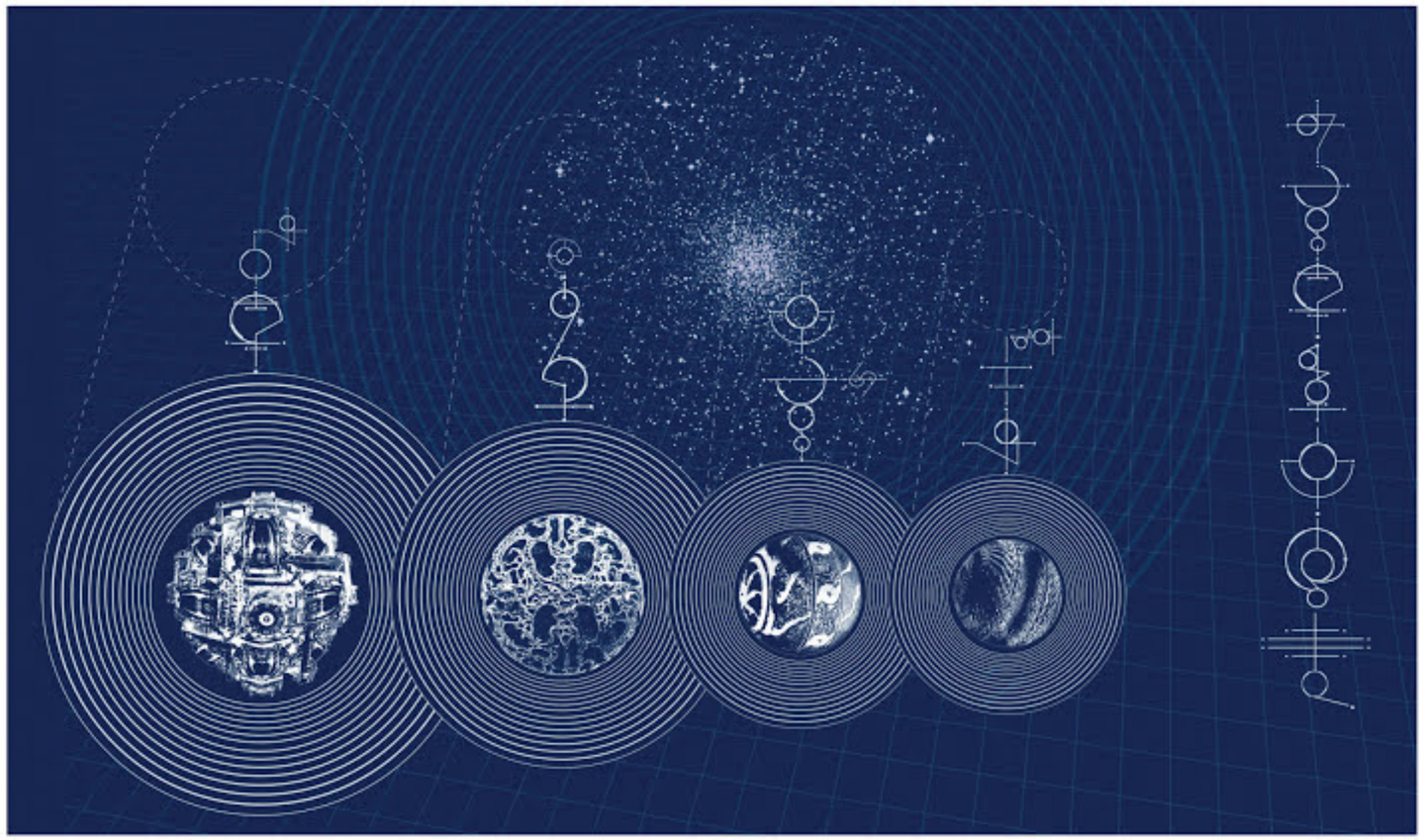
Temple Vault detail REF ONLY

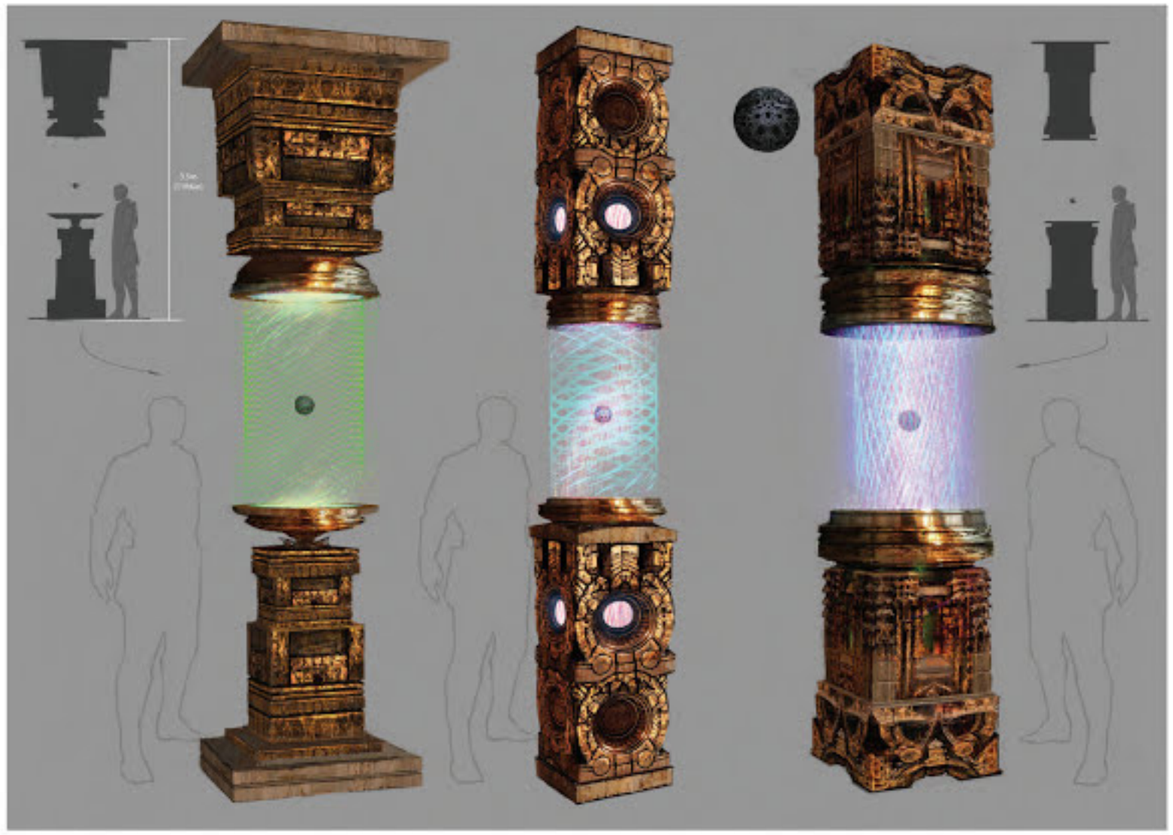
▲ TOP **CHESHIRE** ▲ **FINAL PRODUCTION PROP**

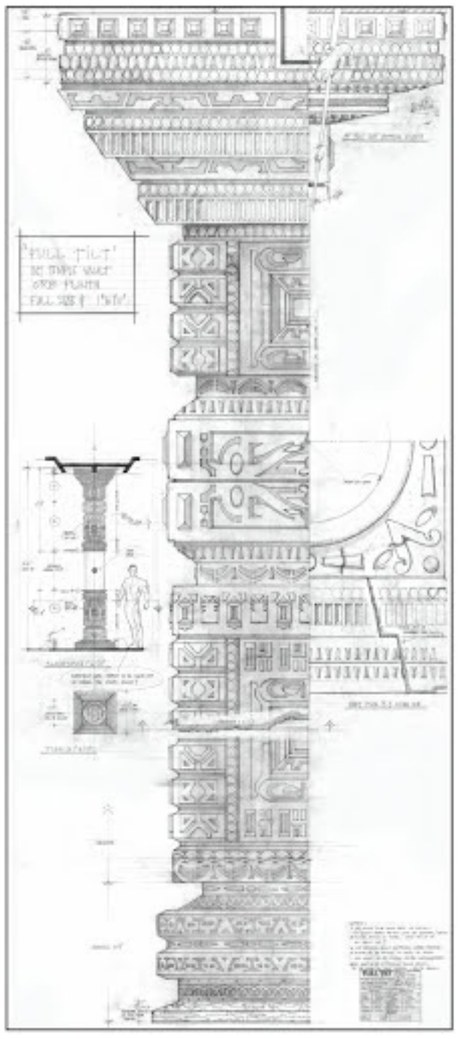


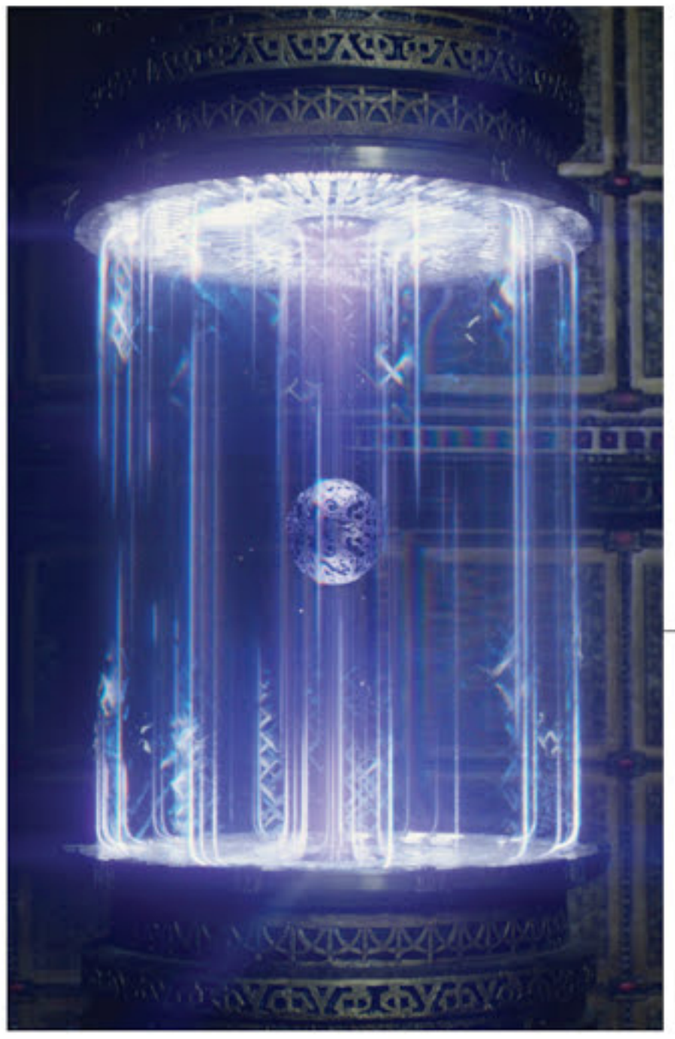
▲ **PRODUCTION STILL**

FINAL PRODUCTION PROP ▲









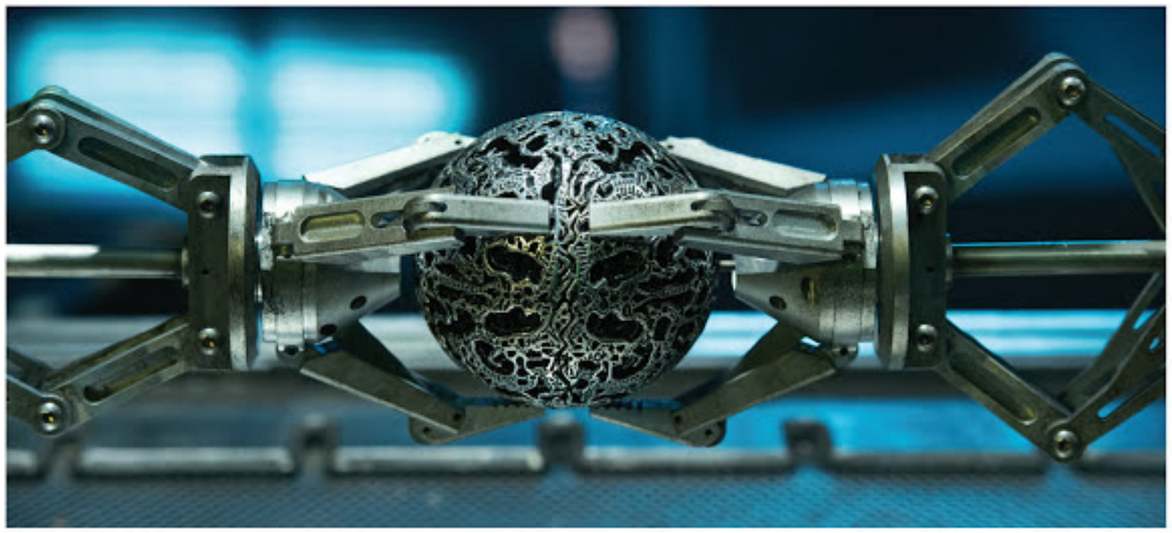
Within the bowels of the temple, Star-Lord finds the orb containing the Power Stone sitting high upon a pedestal. "He's gone through this kind of crazy-dangerous, cat-and-rat chase of getting to this temple in an Indiana Jones style, and he eventually gets into the center and there's the orb," Wood says. "And he thinks he's got it, but he hasn't quite yet. This pedestal was rather like looking at the Hope Diamond. A lot of this was taken from actually looking at diamonds in display cases and trying to show the audience that this is the most valuable thing ever—but it was also the most beguiling thing and the most dangerous thing to try to get. We also tried to make it very beautiful. It's very much like a little meteorite ball—something created from a material we don't really understand."

▲ TOP **CHESHIRE** ▲ **DEHOFF-BOURNE** ▲ **PRODUCTION STILL** ▲ **PRODUCTION STILL**

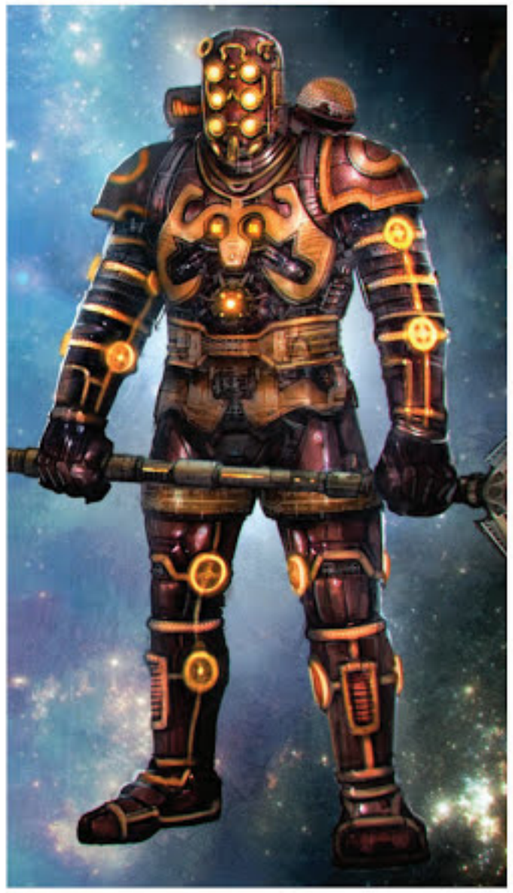
The Guardians of the Galaxy head to Knowhere to sell the orb to the Collector. It is here, in Taneleer Tivan's lab, that we first hear the history of the Infinity Stones—and witness the purple Stone's capacity for mass destruction.

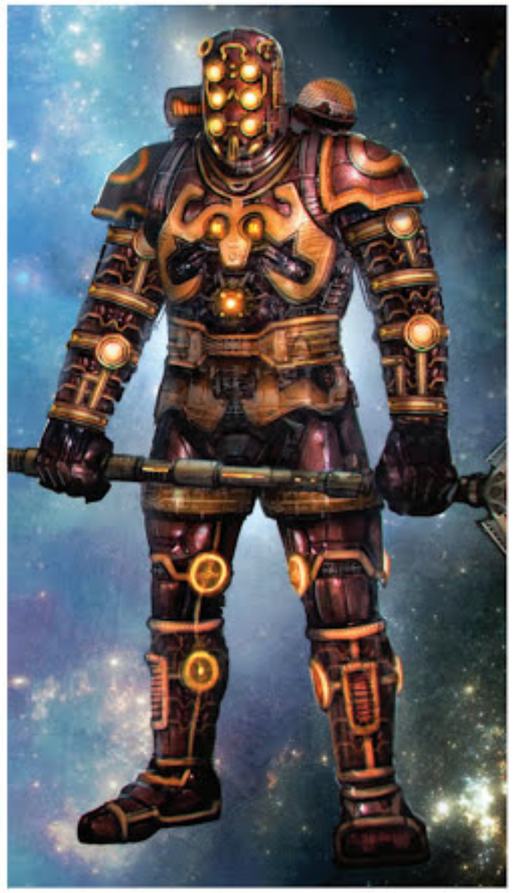
Wary of the Stone's power, the Collector dares not handle the orb directly. "In the scene, we had to open this ball that encased the Stone," Charles Wood says. "But it was so dangerous to do it, it would be done completely mechanically and you would stay away from it—rather like in a lab that contains a highly infectious virus. This whole buildup in the scene—where the mechanism had to grab the ball, turn it multiple times, and pry it open—was very much a mechanical reveal of something you really didn't want to touch. And obviously when you did, some terrible things happened."

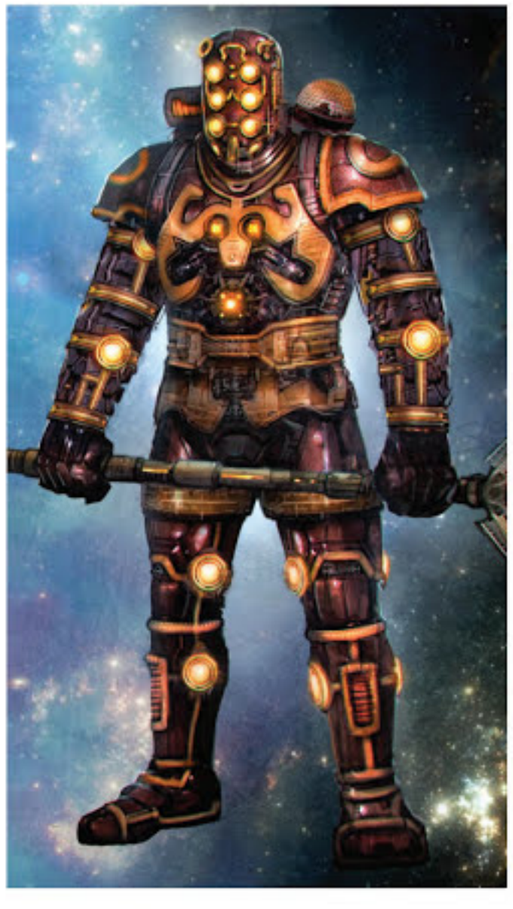
Carina, a slave owned by the Collector, sees the Power Stone as a path to freedom. She lunges toward the Stone and is immediately overwhelmed by its power. "Carina is the first one that shows the audience what happens," Andy Park says. "Not just anyone can wield, or even hold, the Power Stone. She is tempted. She sees her moment. She takes her opportunity, grabs the Stone, and becomes overwhelmed and essentially disintegrates. A normal being can't hold that kind of power in their hands. I was playing around with different ways of depicting that dark power with her. I wanted to create, in that keyframe at least, more of a dark power."

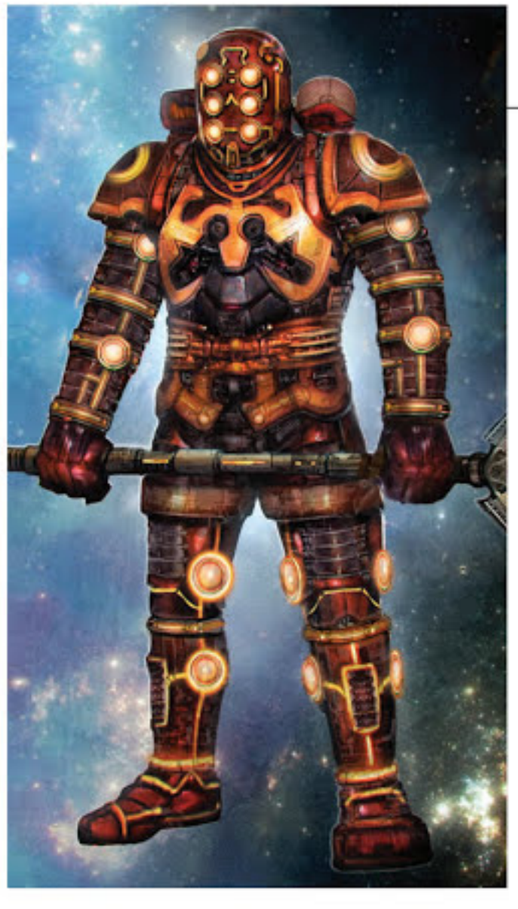


◂ CASTRO ▲ TOP PRODUCTION STILLS ▲ PARK









METHOD STUDIOS

During the Collector's explanation of Infinity Stones, he displays several images on the screens in his lab. Tivan also foreshadowed a later plot point, revealing that a group of people was once able to briefly share the Stone's energy.

▲ SWEET

▲ DUDMAN

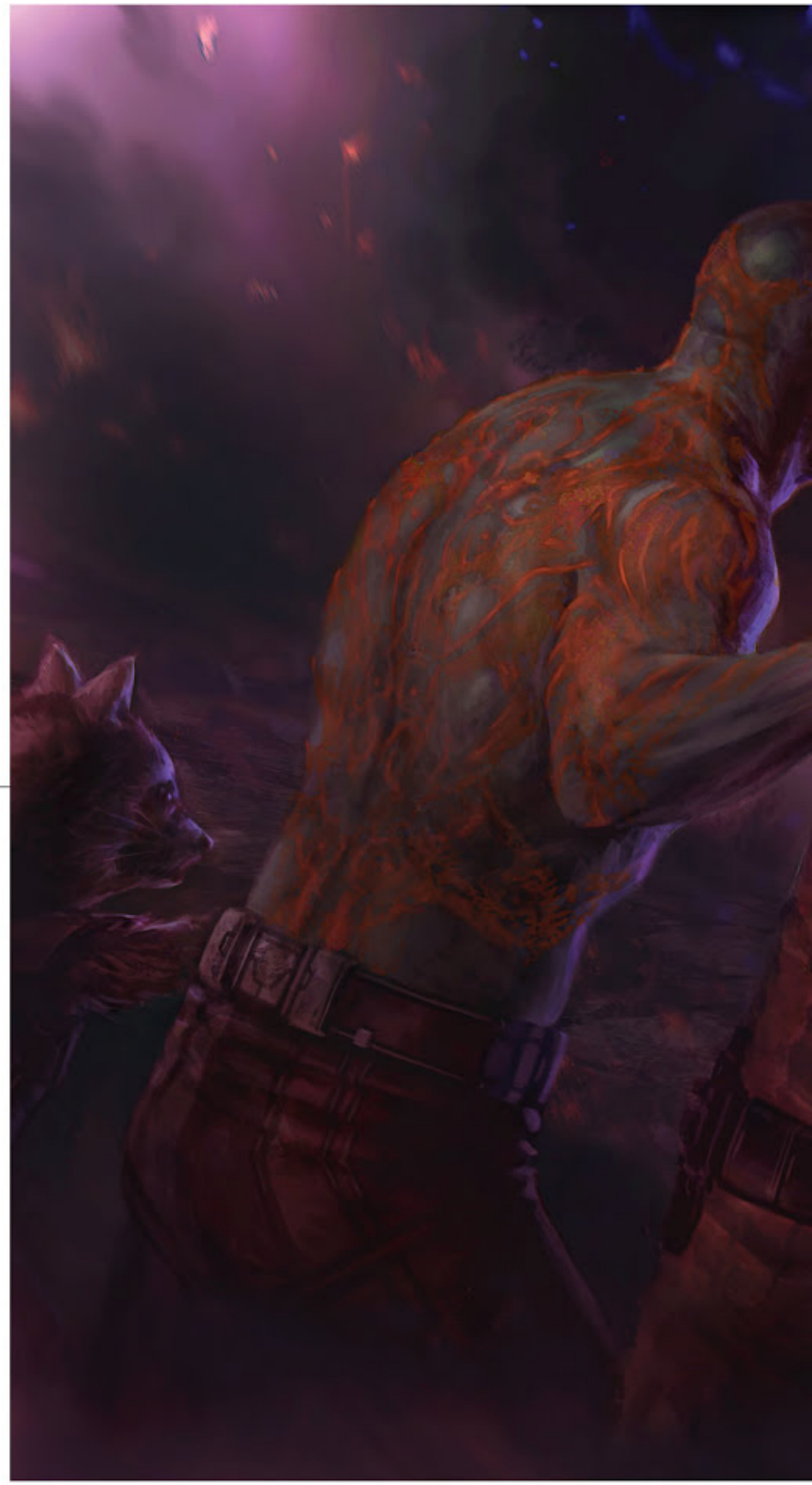
When Ronan finds himself in possession of the Power Stone, he choses to wield it by fusing it with the head of his Cosmi-rod.

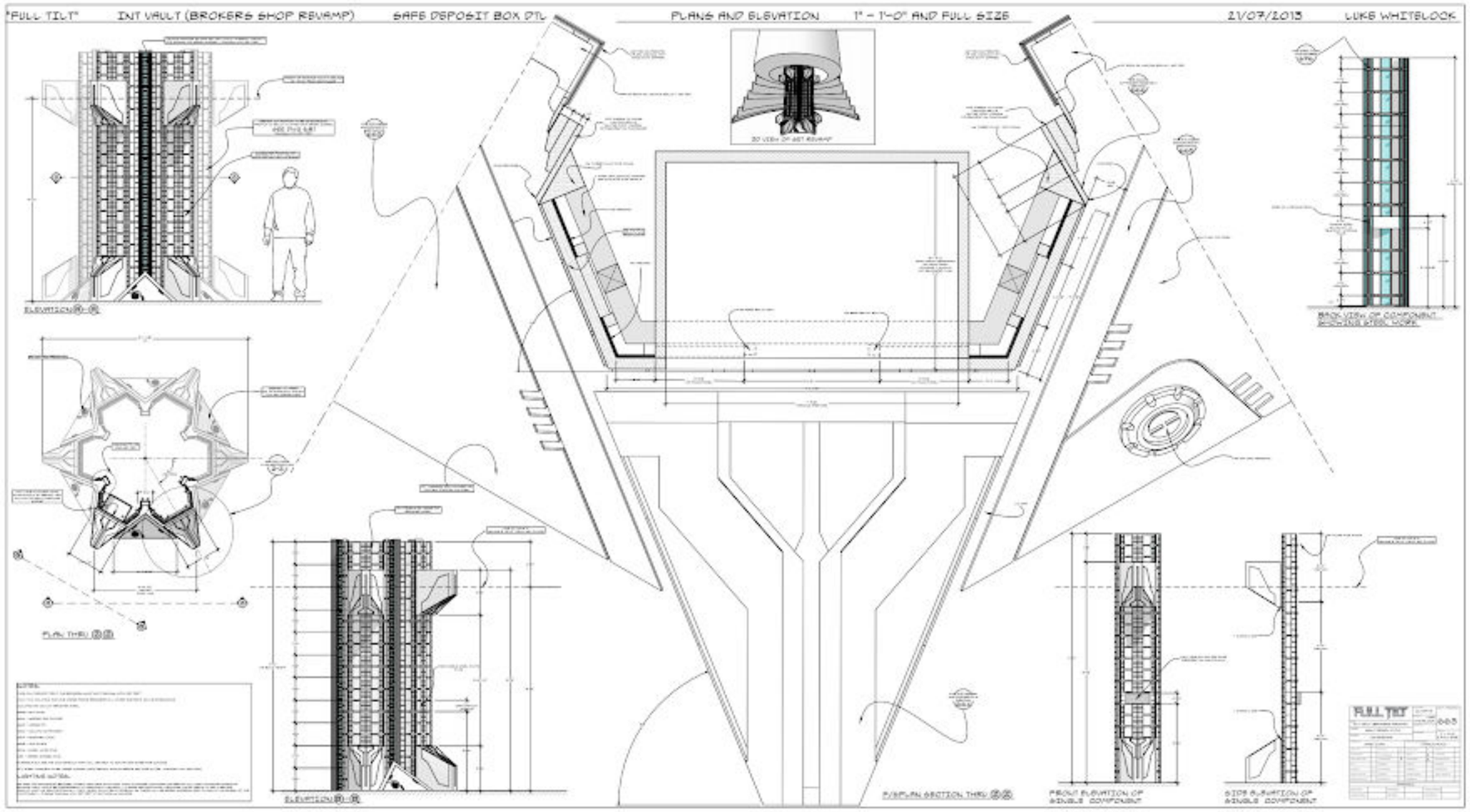
◀ WEN WALKER ▲ PRODUCTION STILL ▲

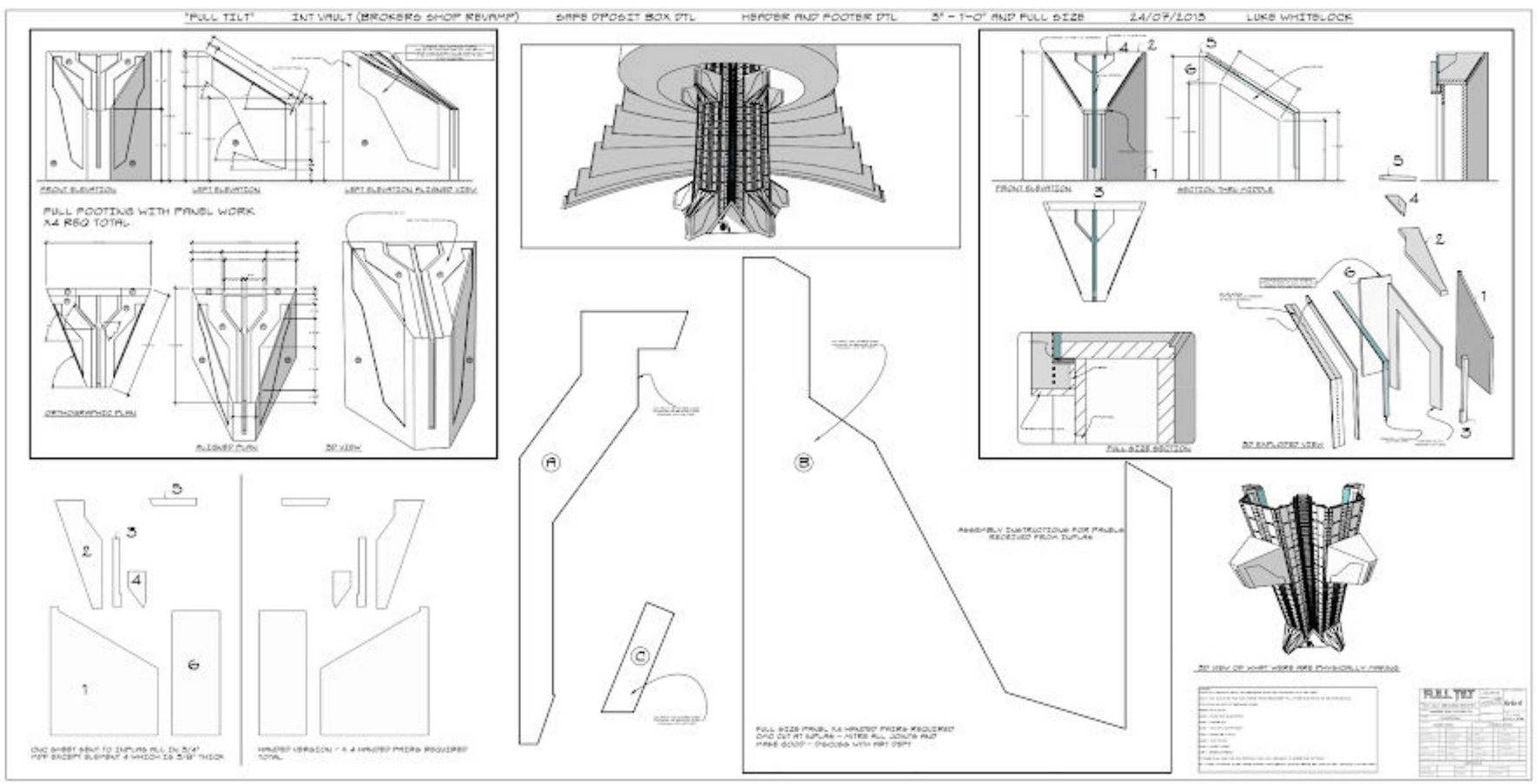
▲ TOP PARK ▲ PRODUCTION STILL

▲ PRODUCTION STILL

When Star-Lord grabs the Power Stone with his bare hand, it begins to overpower him—until his fellow Guardians of the Galaxy step up to share the Stone's energy. "That's when they became a family," Park says, "showing the moment of unity of them becoming a team—the band of characters embracing each other rather than fending for themselves like they're used to. It's the climactic moment when they're able to save the galaxy."



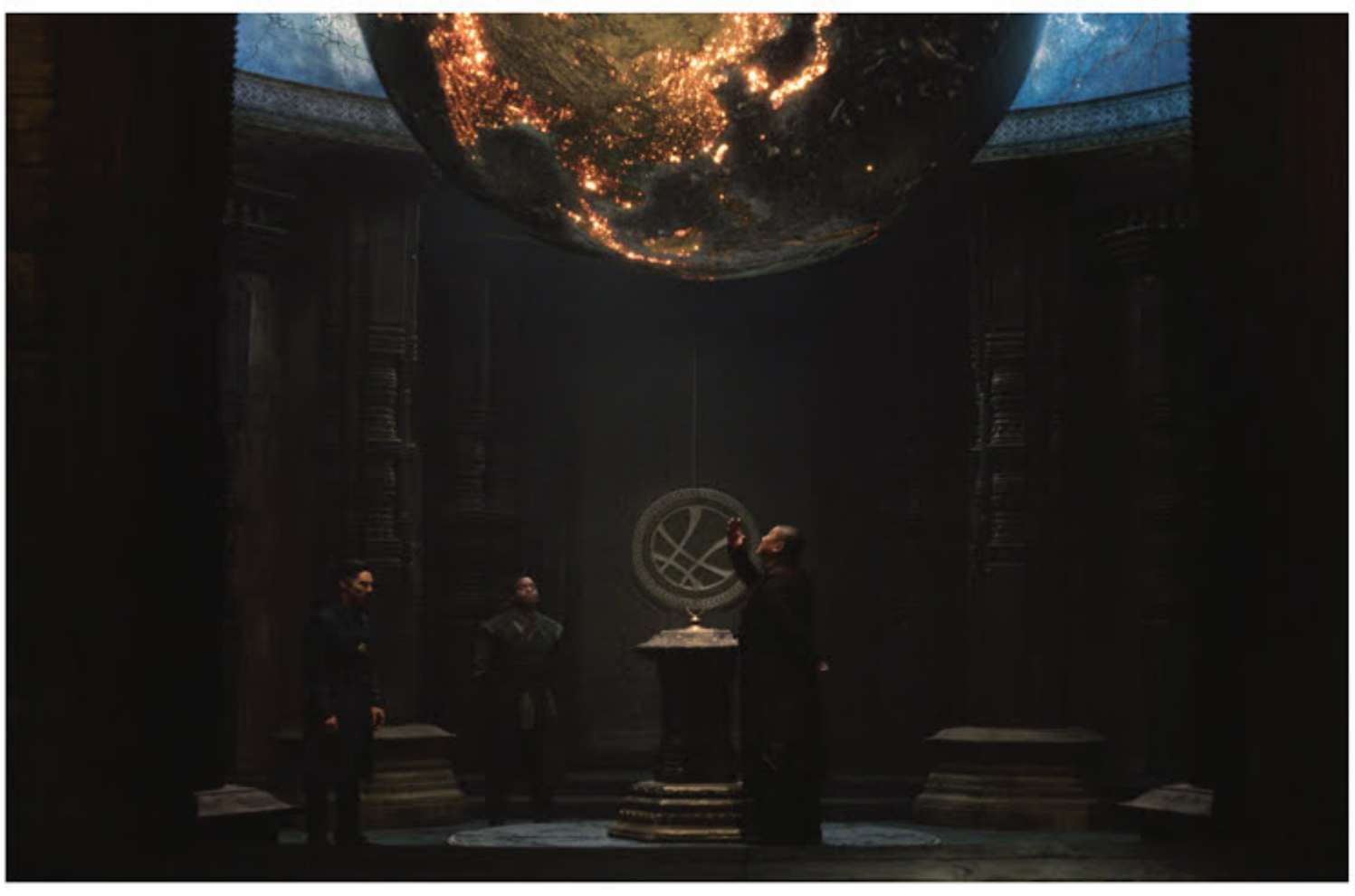


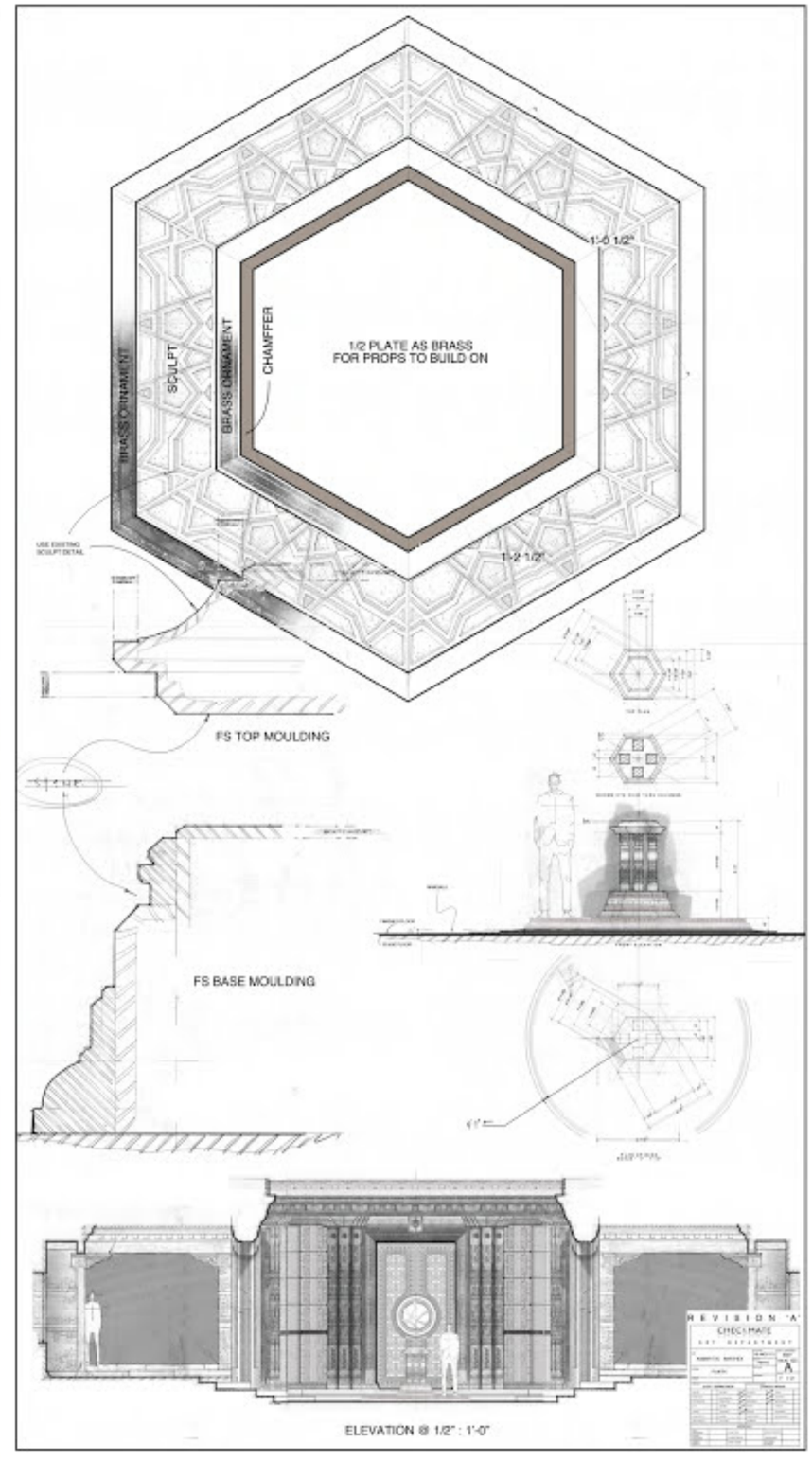


To keep the Power Stone from falling into the wrong hands, the Guardians of the Galaxy handed over the purple Stone to the Nova Corps. "The whole idea here in Xandar was that if you went into this vault, this room, if you were to break into it, you would have no idea where it was," Charles Wood says. "The vault was completely faceless with many, many options and many little doors. It's a bit like a bank vault. The facelessness was a way of adding another level of security to the vault that housed the Power Stone."

WHITELOCK ■

TOP **CASTRO**; BOTTOM **PRODUCTION STILL** ▸





The Time Stone enables manipulation of the past, present, and future. Housed within the ancient Eye of Agamotto, the green Stone was protected by the Masters of the Mystic Arts.

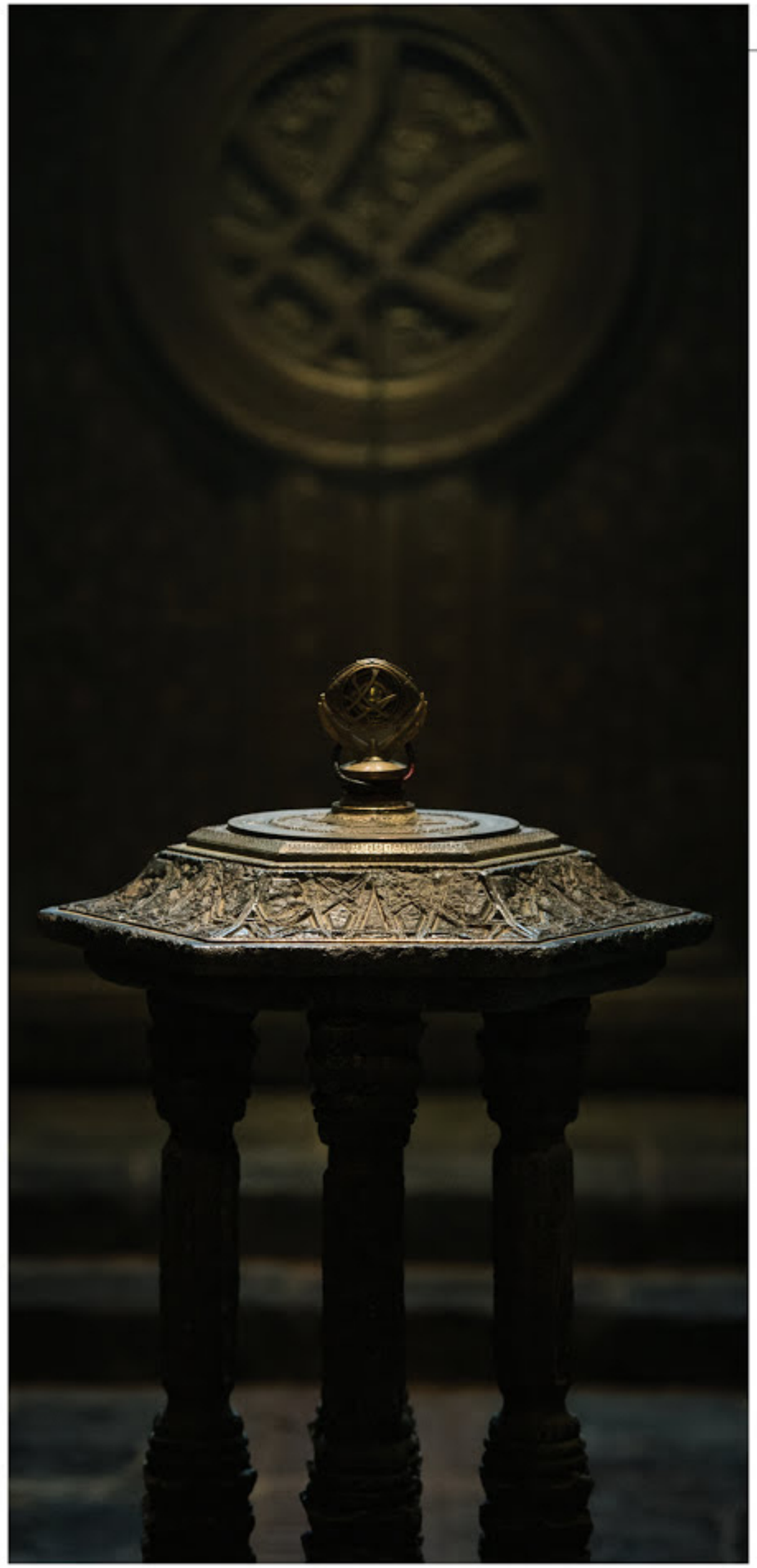
TOP **THOMPSON**; BOTTOM **PRODUCTION STILL** ▲

TIME

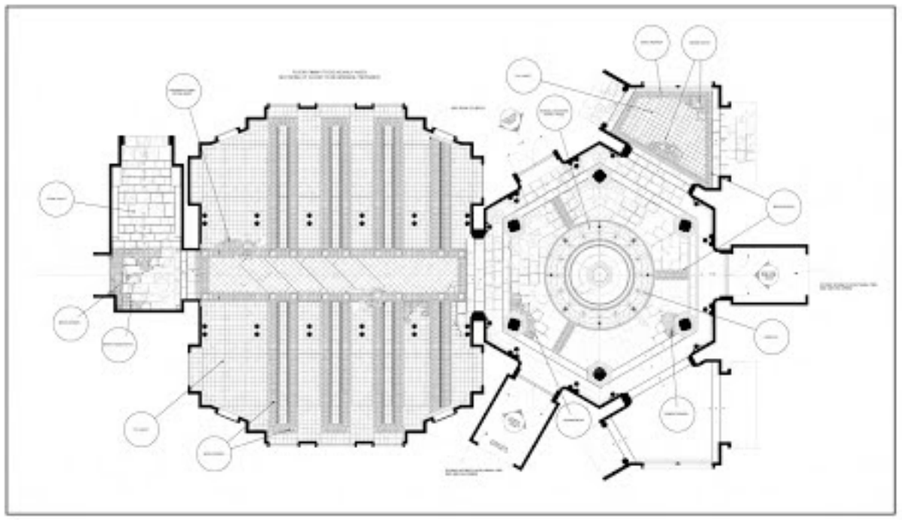
THE EYE OF AGAMOTTO

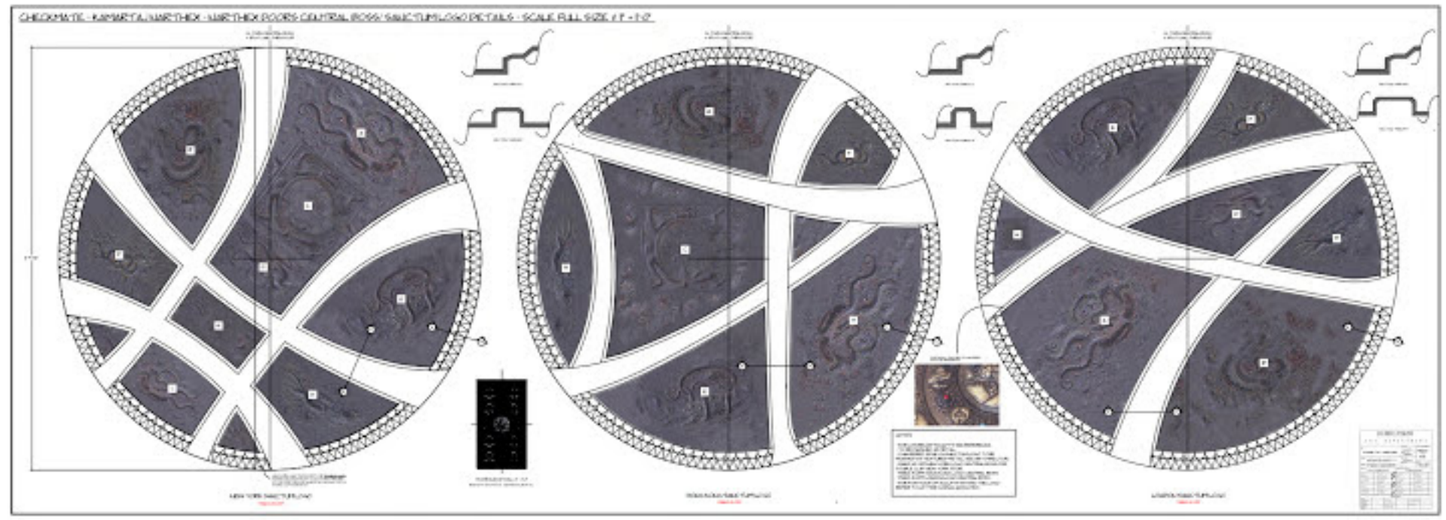
▲ TOP **FINAL PRODUCTION PROP**; BOTTOM **PRODUCTION STILL**

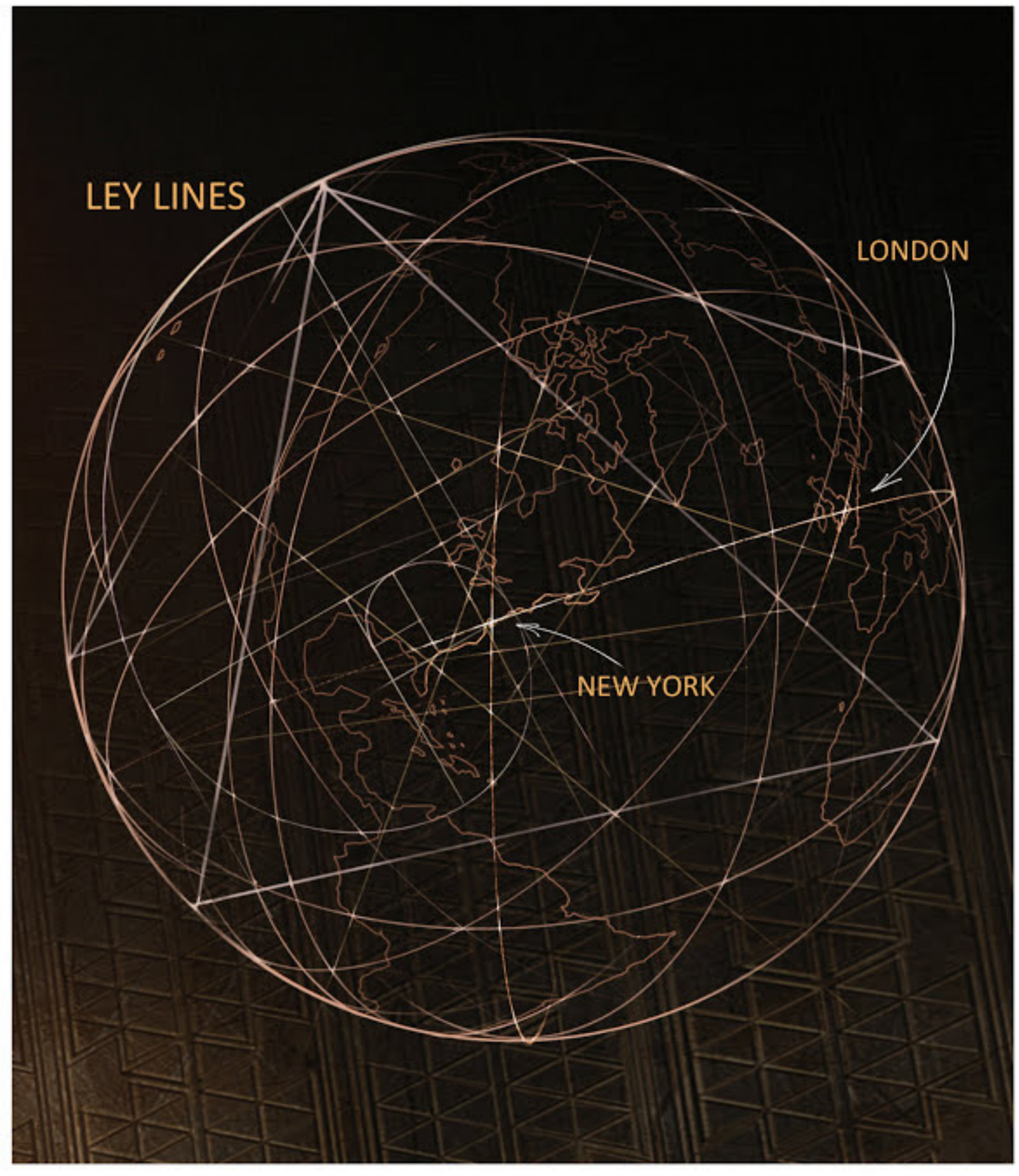
▲ **ORTIZ** & **DUDMAN**



The Eye of Agamotto was kept at the Kamar-Taj, home to the Masters of the Mystic Arts. "[This] room in Nepal, Kathmandu, housed the Time Stone," *Doctor Strange* Production Designer Charles Wood says. "This is a most spiritual place, and the Time Stone itself was housed under this globe. It's a map of the world, and it has little hotspots on it showing the locations of the different Sanctum Sanctorums around the world. To get into this room would be extremely difficult. This had a period flavor to it, and the architecture was very much Far East Asian. Its design was something that was all about magic and sorcery."







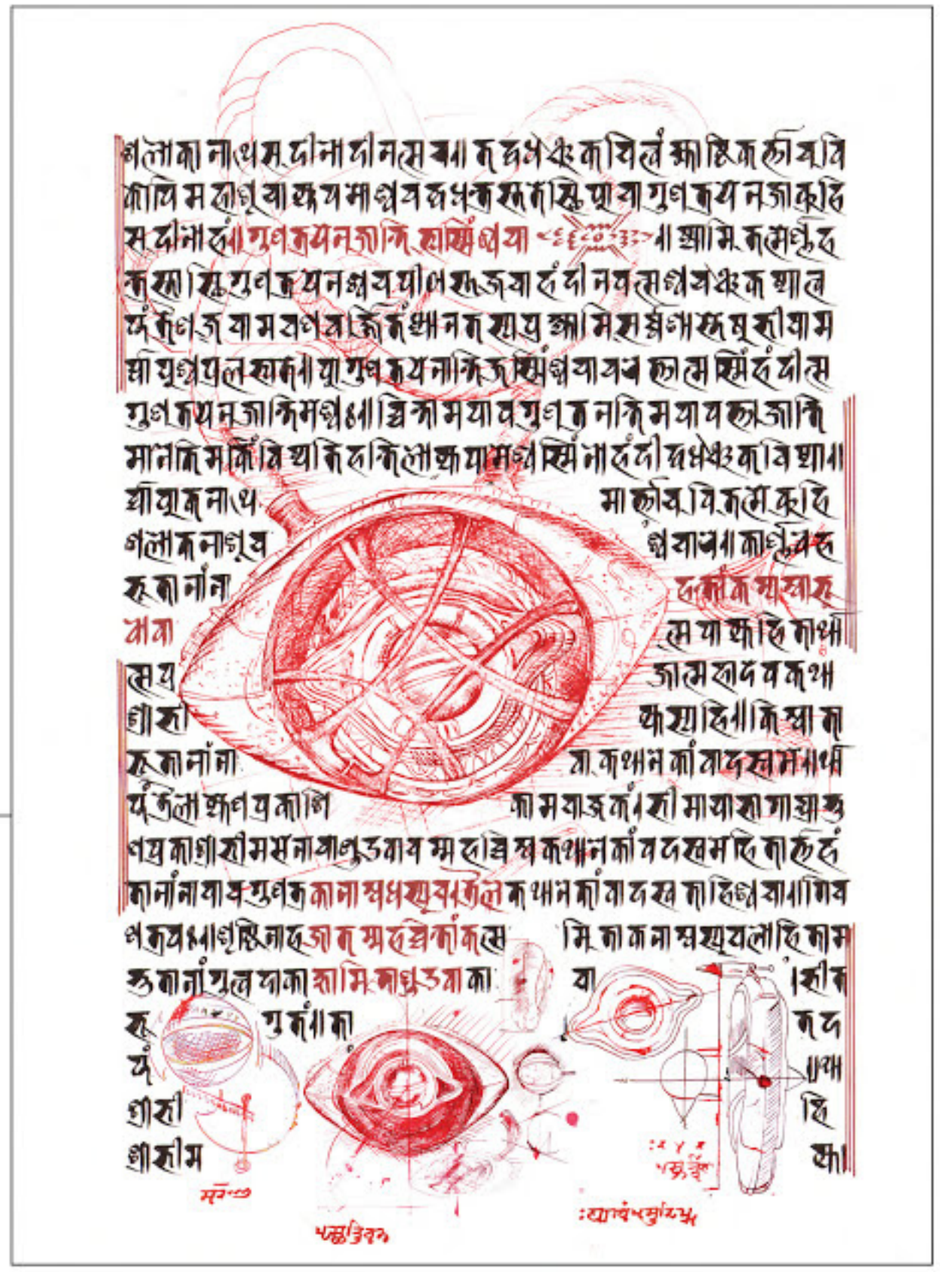
▲ TOP LEFT **IFAN**; TOP RIGHT **GINN** ▲ **PRODUCTION STILLS**

▲ **CHESHIRE**

Stephen Strange learns how to harness the Time Stone energy by studying the *Book of Cagliostro*, a tome in The Ancient One's private collection.

PRODUCTION STILL ▲

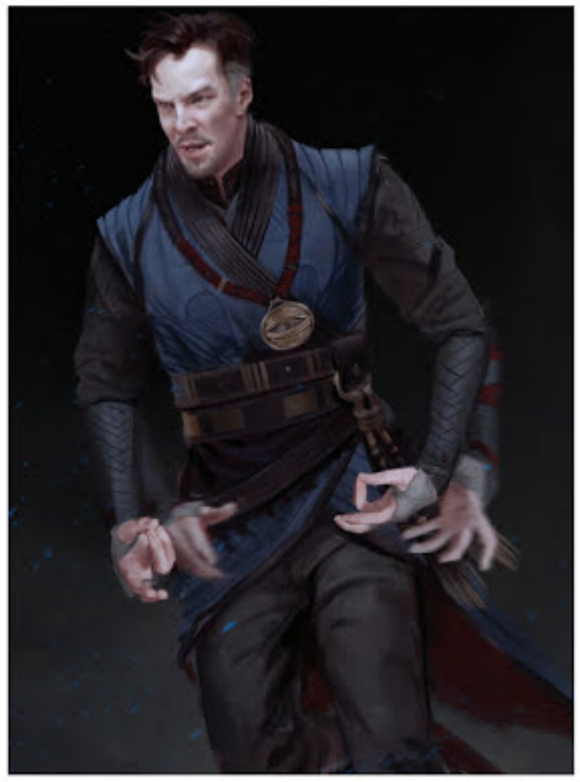
TOP FINAL PRODUCTION PROPS

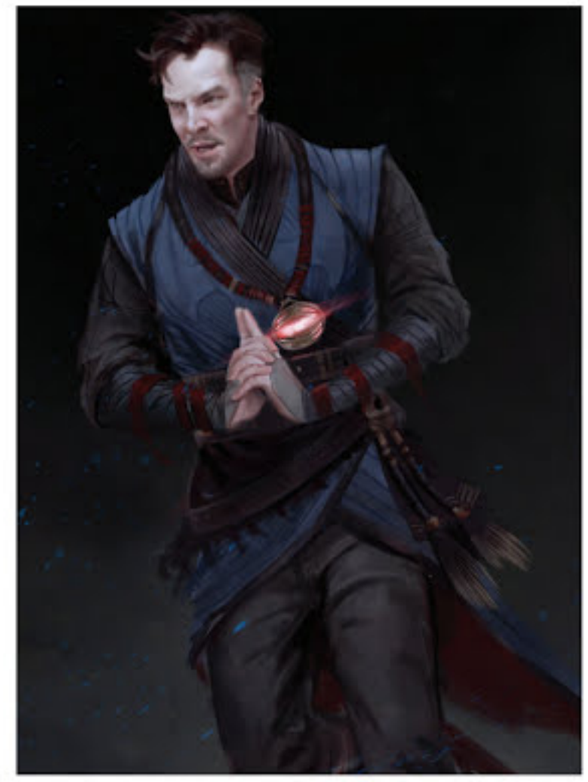


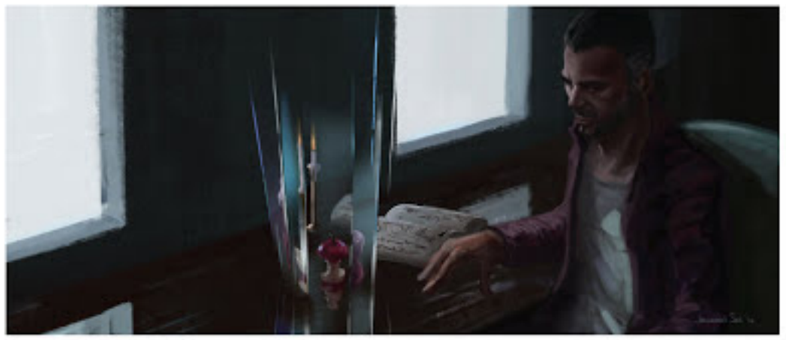
▲ TOP PAYNE ▲ FINAL PRODUCTION PROP

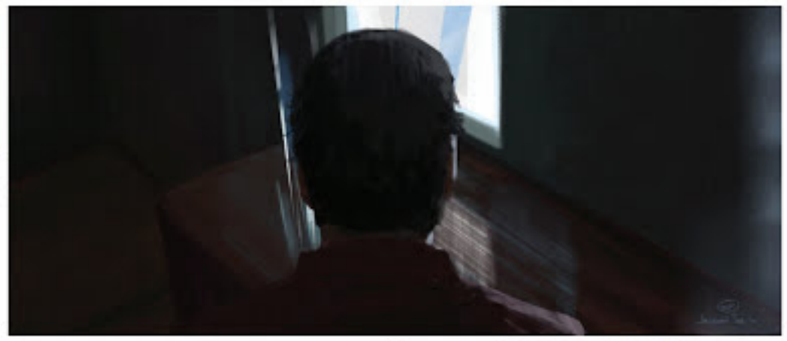
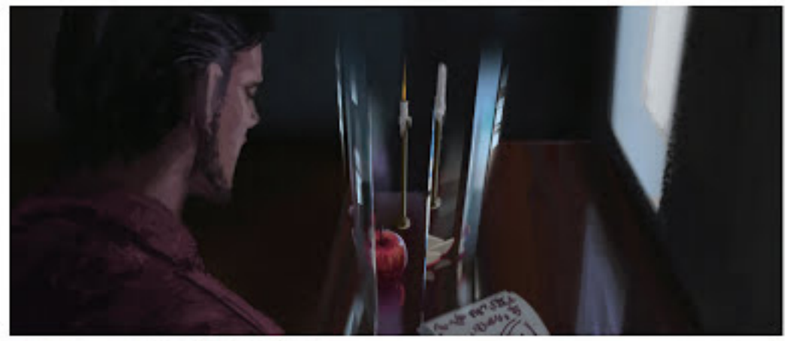
▲ PRODUCTION STILLS

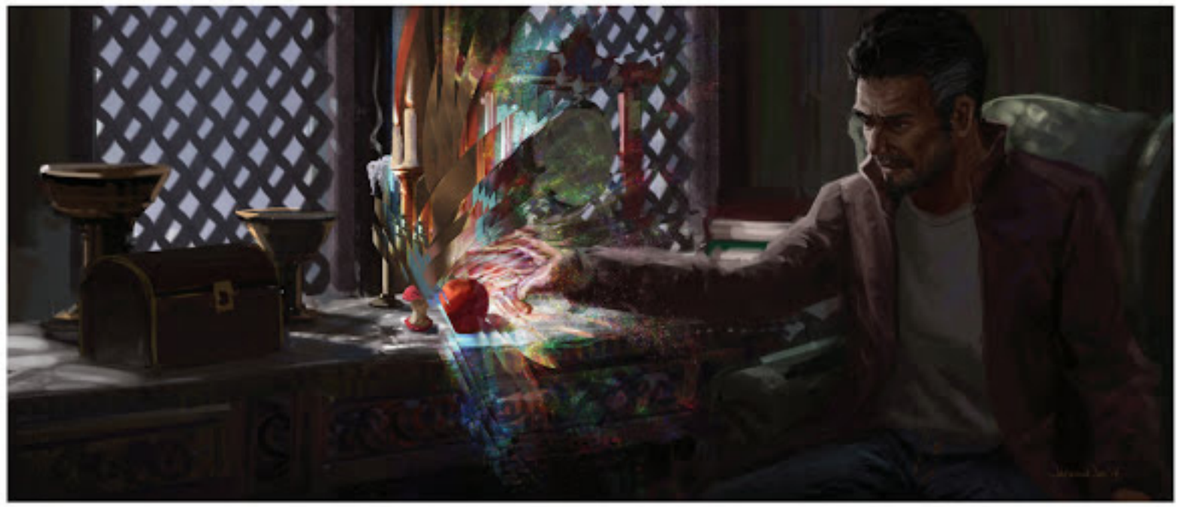
JACKSON SOTO '14



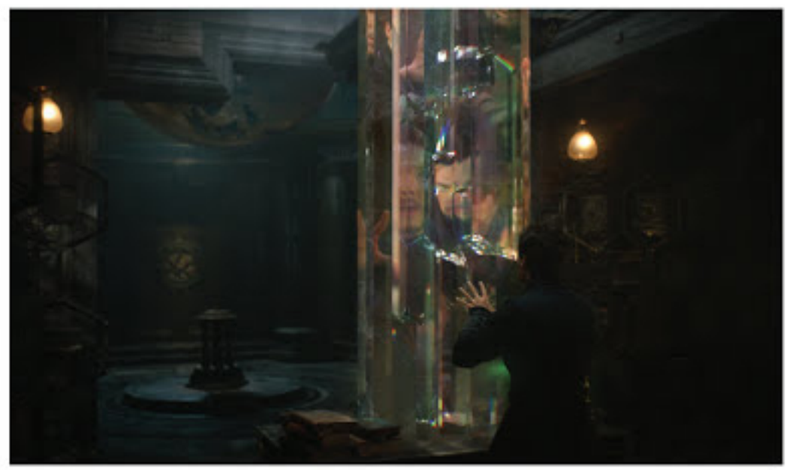




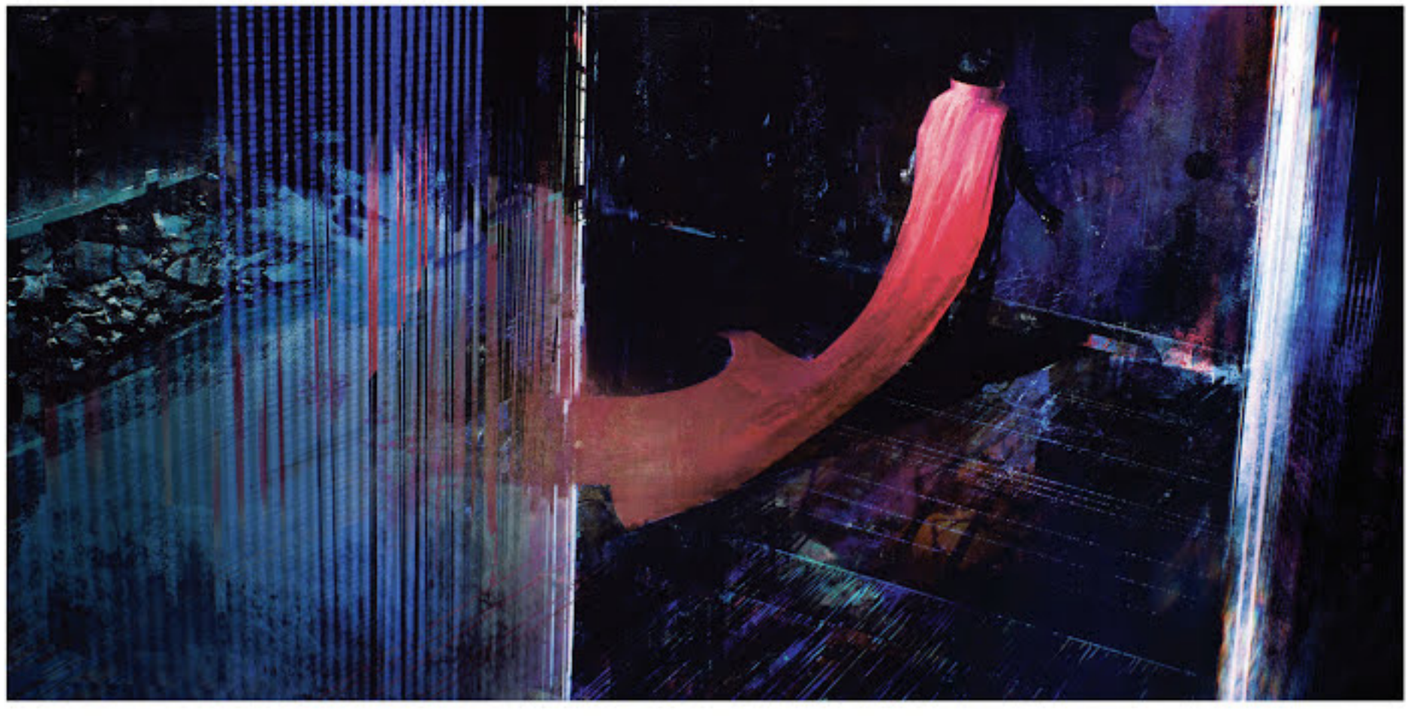





"We knew Doctor Strange's hand gestures were going to be important," Jackson Sze says. "This is actually part of a series of images in which he unlocks the Eye of Agamotto using hand signs, emphasizing that gesture will be important to this character."



▲ TOP **SZE**; BOTTOM **PRODUCTION STILLS**



ROAD TO AVENGERS: ENDGAME

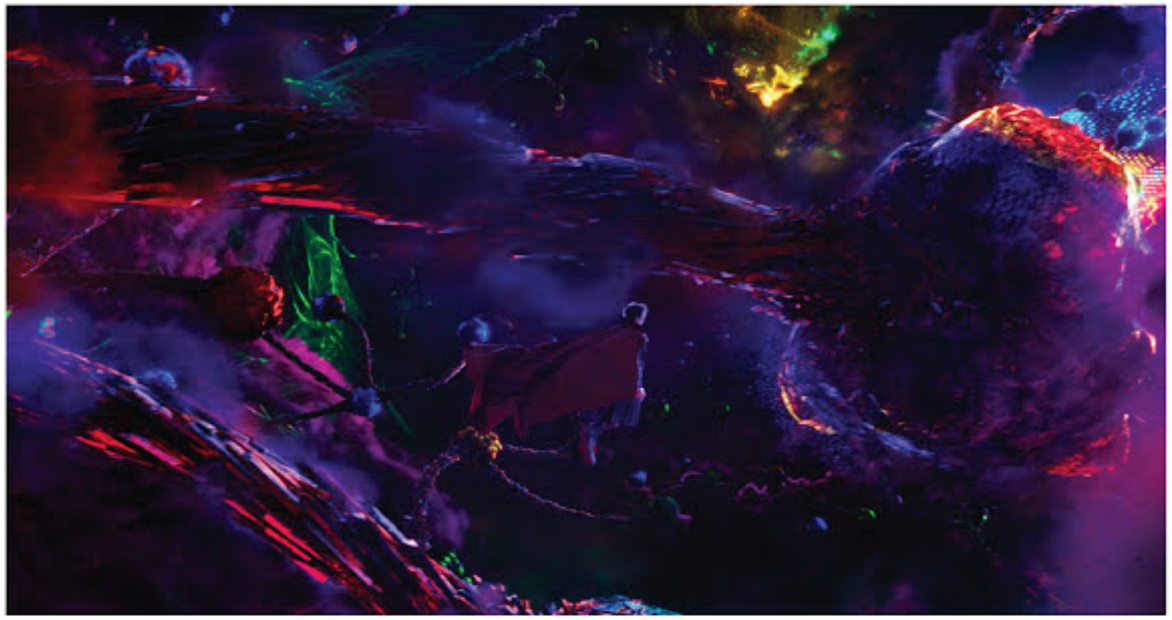
MANDRADJIEV ▲

MANDRADJIEV ▲ TOP THOMPSON ▲

Arriving in Hong Kong too late to help protect its Sanctum, Doctor Strange uses the Time Stone to reverse the damage and springs into action, ensuring the former reality would not repeat itself. "That was a complicated little number," Wood says. "Originally, we were going to go to Hong Kong, and then we decided not to because the scene was just too complex, so we decided we had to build it all in the UK. We spent a lot of time with the set designer based out of Hong Kong, and we matched a lot of the buildings in Kowloon. We brought all of that information back and rebuilt all of those buildings in our hypothetical street, which we were sort of saying was in Kowloon. It took a lot of time and a lot of detailing to create that."

▲ THOMPSON

▲ TOP PRODUCTION STILLS



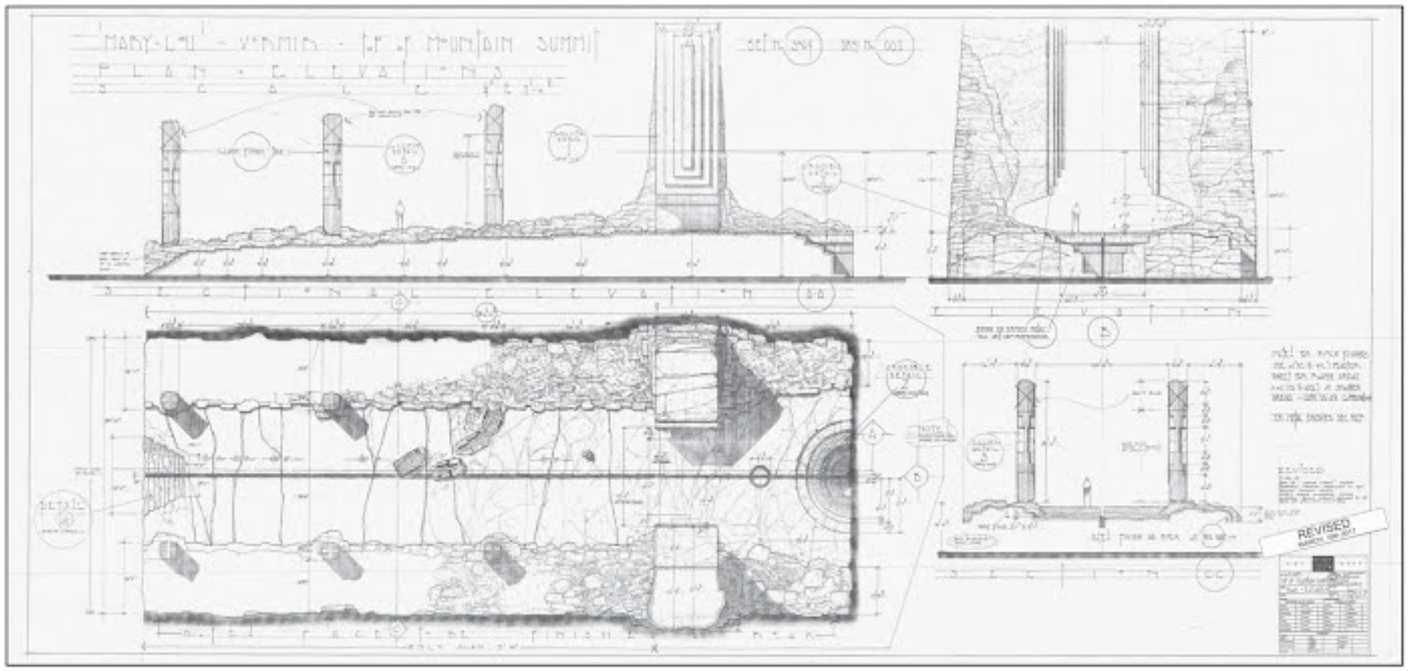
FRANCISCO ▲ TOP PRODUCTION STILLS ▲ TOP MANDRADJIEV, BOTTOM MEINERDING ▲

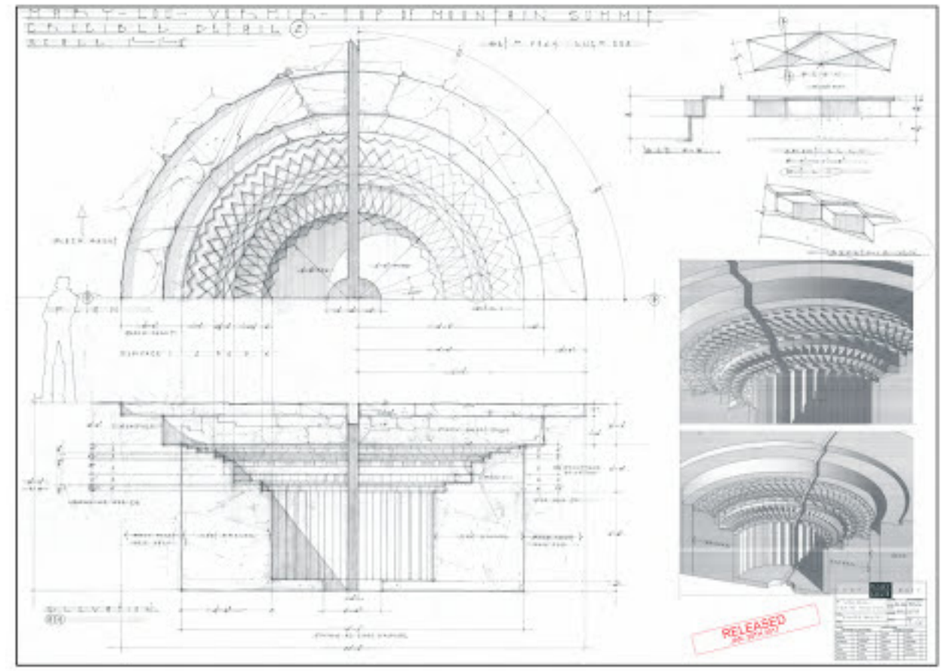
▲ TOP **MEINERDING** ▲ **PRODUCTION STILL**

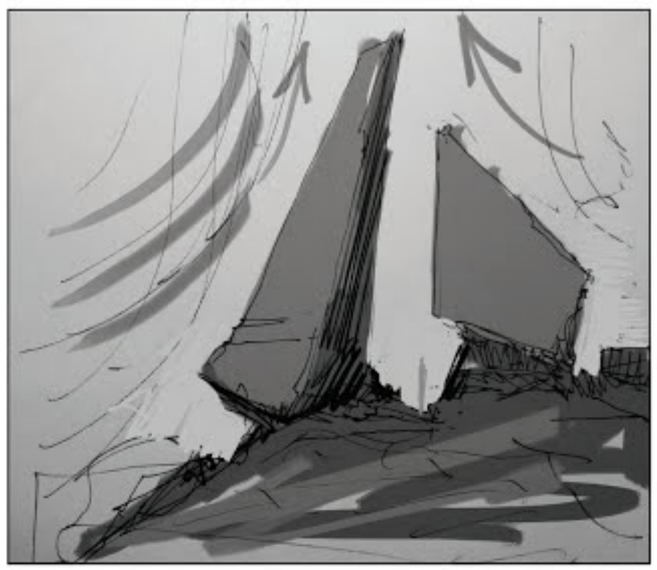
FRANCISCO ■ TOP PRODUCTION STILLS; BOTTOM SCHIBLE ▶

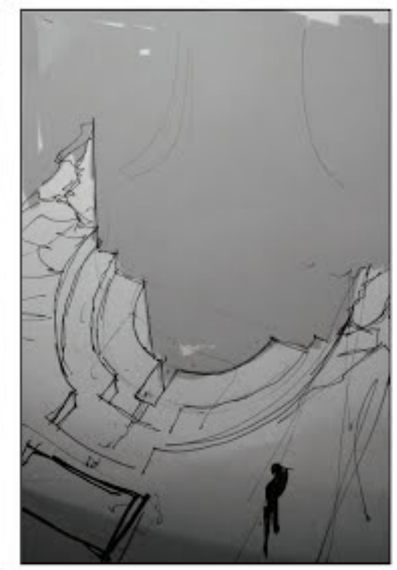
In *Avengers: Infinity War,* Doctor Strange tells Tony Stark he wouldn't hesitate to let either him or the young Peter Parker die if it meant keeping the Time Stone safe—only to later relinquish the Stone to Thanos.

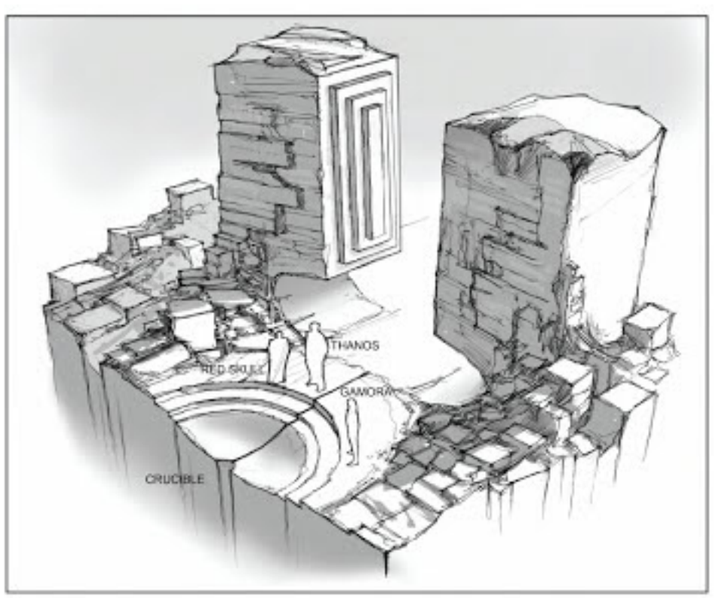
But surely Strange's actions had to serve a larger purpose. After all, Doctor Strange foresaw fourteen million, six hundred and five possible outcomes in the fight against Thanos—and only one in which the heroes were victorious.

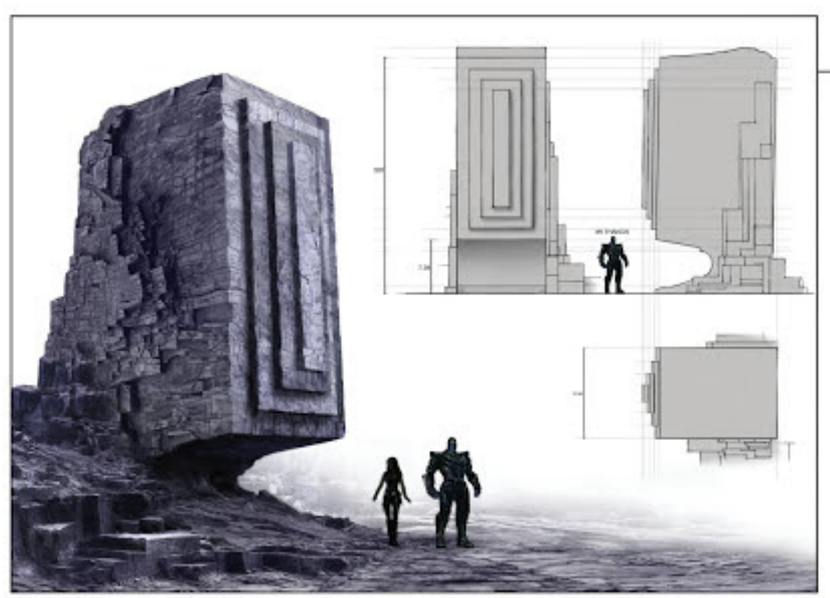












"The Soul Stone itself was held between these two tuning forks," Wood says. "And these tuning forks would vibrate—they have a very slow oscillation to them—and once this Stone event happened on Vormir, it would cause this explosion in the sky, and the whole place would sort of come apart. Again, it's a very primeval structure. And we did actually bring a bit of this tower idea from *Thor: The Dark World*. These two obelisks are similar in shape."

TOP LEFT **SWAIN**; TOP RIGHT **ENGEL**; MIDDLE & BOTTOM **CHESHIRE**

FUENTEBELLA ▲

FUENTEBELLA ▲

FUENTEBELLA ▲

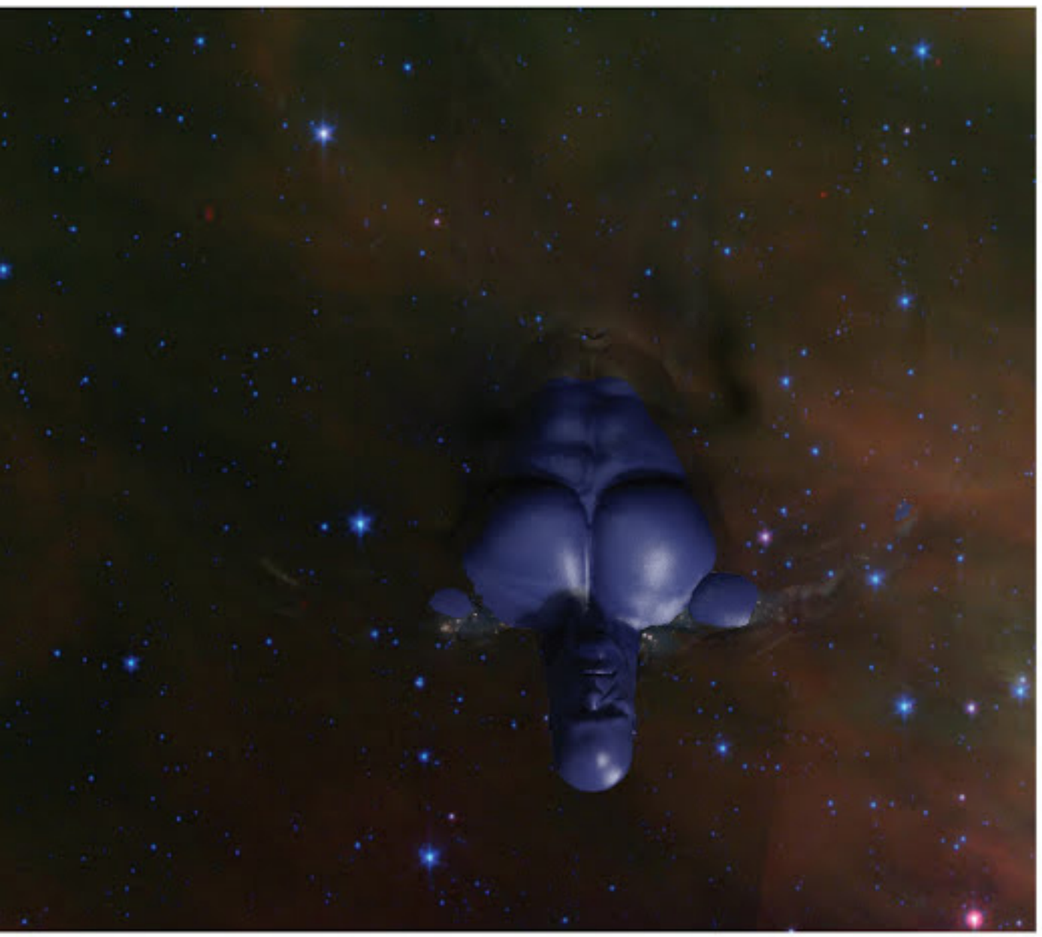
SEKERIS ▲ TOP SCHIBLE ▲

Thanos and Gamora are not alone when they reach the mountaintop. They are greeted by a Stone-keeper: the Red Skull, who had vanished while holding the Tesseract and had not been seen again before this moment.

"It was interesting because we wanted to figure out what he was doing and how he became the keeper of the Stone," Rodney Fuentebella says. "Would he be more emaciated? Did he have a more religious quality about him, almost like a dark angel? Or did he have something that we saw before from other films? Maybe he ran into some Ravagers or something that we saw from *Guardians* and took on that attire? Maybe we should make him seem decrepit? Or would he have something that made him like what you would see in a Baroque or Renaissance painting? These are different takes of how how he could look."

To obtain the Stone, Thanos must sacrifice the soul of someone he loves: Gamora. "One of the most poignant moments for me in the film is when Thanos is singlemindedly dragging Gamora, and she's realizing what's happening and has that sort of fear," Ryan Meinerding says. "It's fear in the frantic flailing of him being a dad and dragging her as a child. You've seen that a million times with parents that have unruly kids—but when you actually know what he's going to do, that gets so much worse. Not only does he think of himself as her father, but in that moment she looks like a child and he just tosses her away. It's very disturbing.

"I knew that they had that structure in place where Gamora was going to be sacrificed, but they didn't specifically ask me for a crying frame. I just thought, if you're going to make this a well-rounded character, we have to show him doing something. So I wanted to do the crying frame. I like the notion of being able to work on digital characters as if they have the full range of expression. They didn't have to push him there. He didn't have to cry, and I think it makes him feel like so much more of a real character that he did."



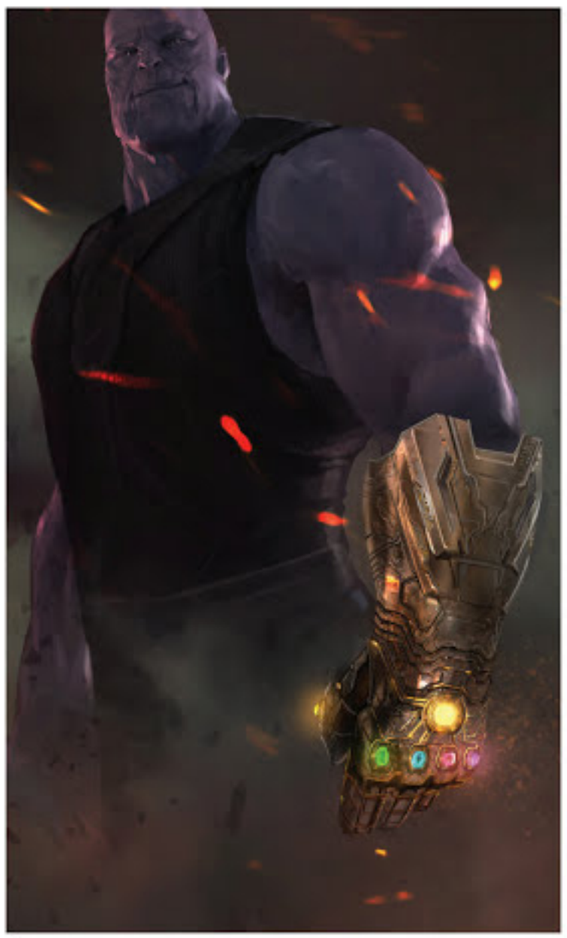
▲ TOP HILL ▲ PRODUCTION STILL

▲ PRODUCTION STILL

Thanos wins. He collects all the Infinity Stones and eradicates half of all living things with a single snap. This loss will push the surviving heroes to places viewers haven't seen before.

"Most of the characters are at their lowest point at the end of *Infinity War*," Meinerding says. "There are so many things that have gone wrong in their personal journeys that have either broken up the team, or broken up their families, or broken up their sense of self—and failing at the end of *Infinity War*, and failing as a fractured team, will be extremely difficult. Specifically with Thor, I think he always thought of himself as one of the most capable Avengers. And to realize he failed utterly and totally, and could have been successful if he hadn't had the hubris of wanting to talk to Thanos before he died, is going to weigh incredibly heavily on his shoulders."

THANOS



TOP PRODUCTION STILL ▲ FUENTEBELLA ▲ FLATTERY ▲ MEINERDING ▲

Once Thanos achieves his goal, he is content. "This whole idea actually came from Kevin [Feige] and the studio," Wood says. "Day one. The first thing he spoke about when we started these films is he really wanted to convey the idea that Thanos, by this point, had achieved what he needed to achieve. So whatever destruction had taken place, he was sort of sorry for it, but he'd done his thing and now was content and could now go back to the place he wanted to be—which was in a very rural, peaceful setting. He cast aside all the riches that he could have and just wanted to become the sort of man who was content and satisfied and live in a very simple way.

"We were looking at all of these beautiful rice paddy fields in the Philippines, and we came up with this idea that he would run his fingers through his fields, and his little hut or yurt or whatever you want to call it would sit atop this arable landscape where he would live. He was living in amongst the vegetation, eating simple foods, watching beautiful sunsets, and basically kicking back. Everything was good at this point."

▲ MEINERDING

▲ PRODUCTION STILL

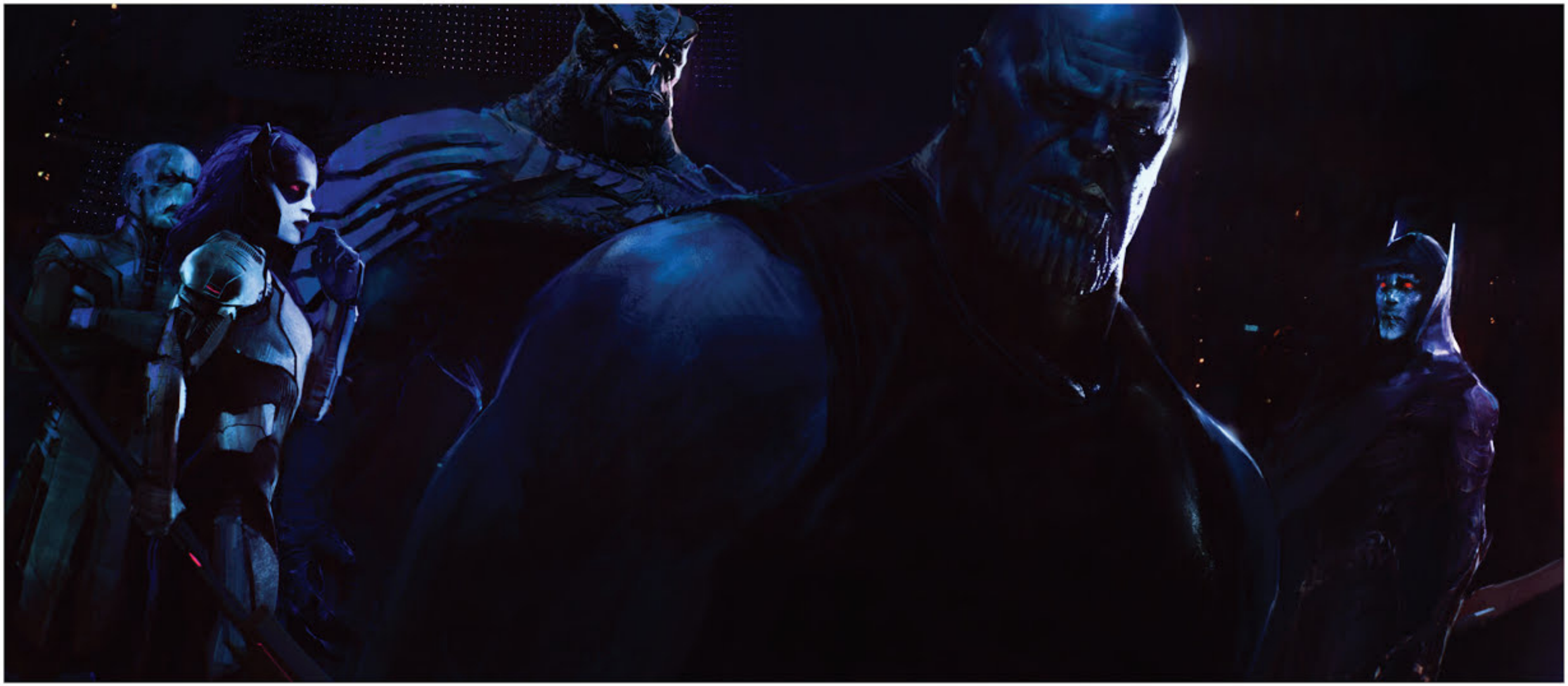
THE CHILDREN OF THANOS

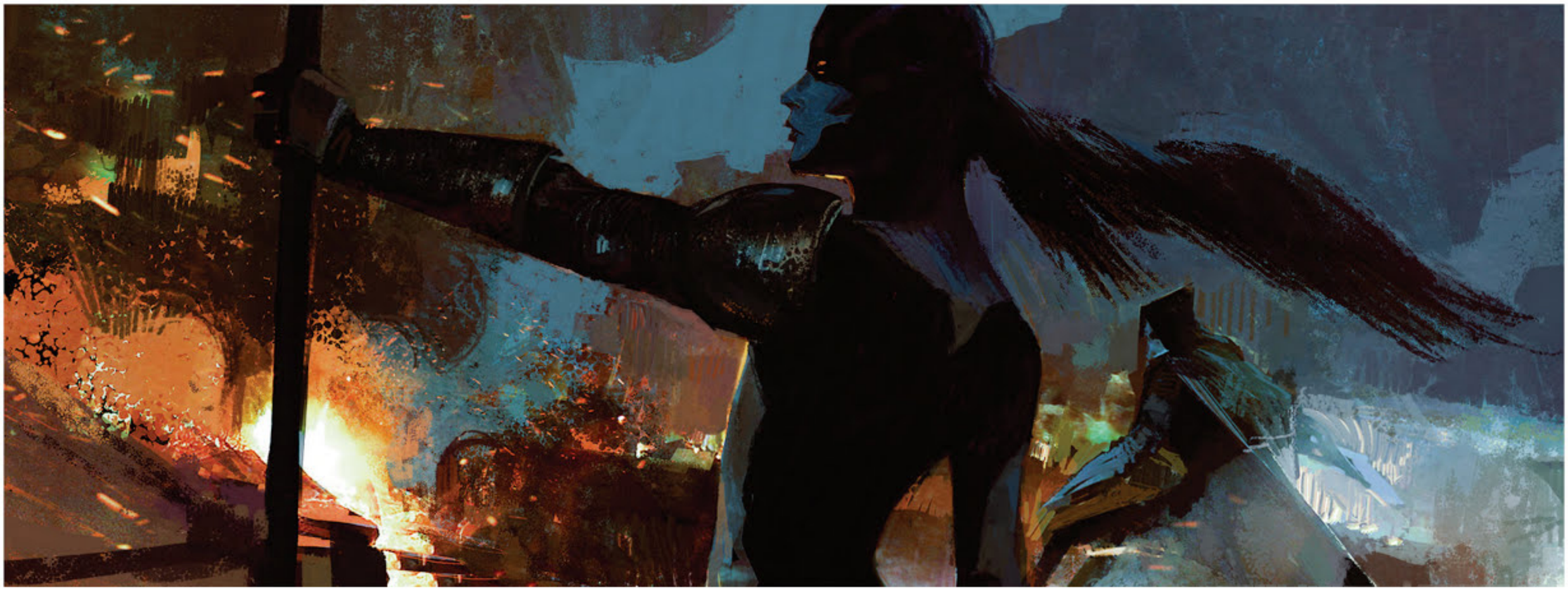
Thanos was not alone in his pursuit of the Infinity Stones. He was aided by his children—Ebony Maw, Proxima Midnight, Cull Obsidian, and Corvus Glaive. Taking children from the planets he conquered, Thanos would slowly shape them during their maturation—both physically and psychologically—into deadly killing machines eager to do his bidding.

For *Avengers: Infinity War*, filmmakers sought to adapt the Children of Thanos from the comics into deadly adversaries, but none who would outshine Thanos himself. "The Children of Thanos, in particular, we worked hard to adjust them to the Marvel Cinematic Universe," Co-Director Joe Russo says. "In the [Jonathan] Hickman run, I thought the characters were too powerful. And nobody wants the subvillain to outshine the villain. And we adjusted their power sets so that they lined up in a way that was more interesting with our heroes."

"The Black Order from the comics are not very well-known characters," Head of Visual Development Ryan Meinerding says. "I think they were initially looking at them as, 'How do we create these lieutenants so they'll be the Avengers of the rest of the universe?' Thanos is going through culling people off these planets, but as he finds an incredibly strong fighter or incredibly powerful individual, he finds a way of adopting them and getting them to work for him. So that's how they were pitched initially: as the evil Avengers of the rest of the universe."

PRODUCTION STILL ▲ MANDRADJIEV ►

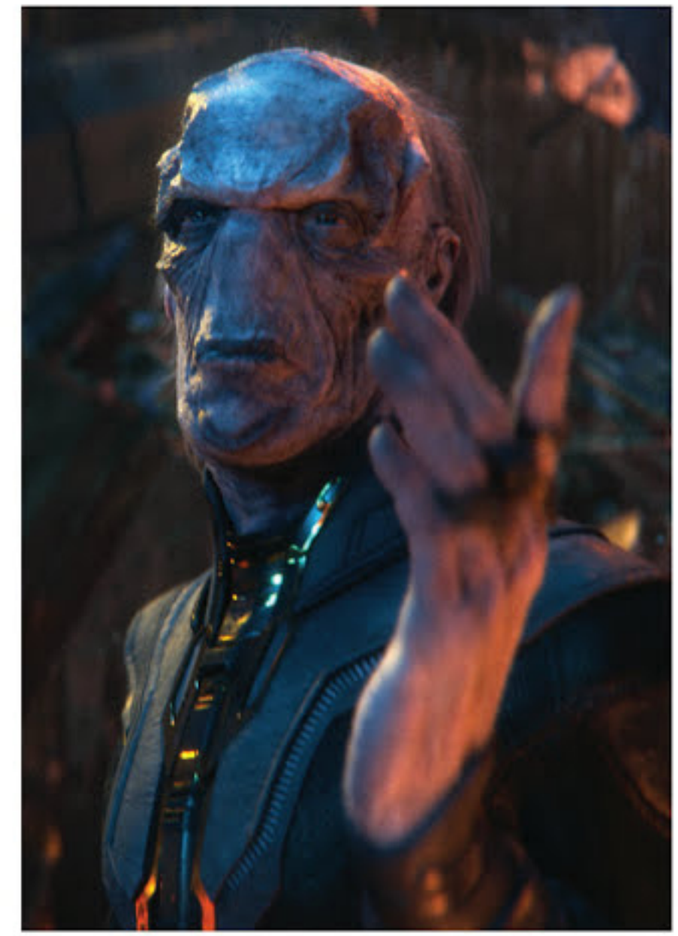


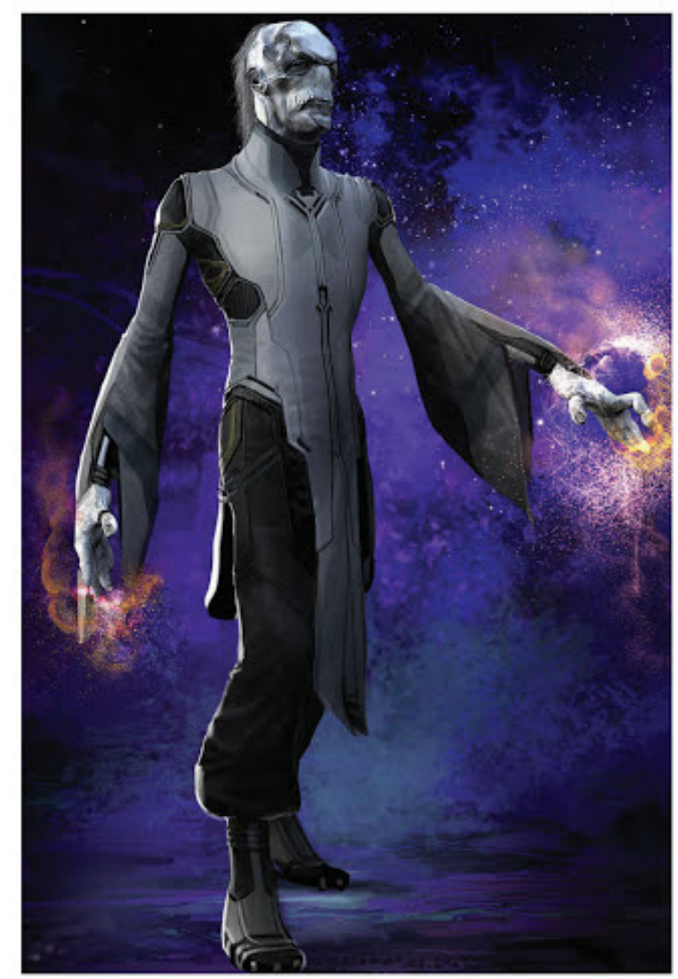


E B O N Y M A W

With the powers of mental manipulation and telekinesis, Ebony Maw's calculated nature puts this lieutenant seemingly one step ahead of any who face him. "What they seemed to do in the movie is turn him into an emissary for Thanos, and I think it worked incredibly well," Ryan Meinerding says. "He's definitely the most well-represented of them in the movie, and it's exciting to see him interact with the characters and have wordplay, which played incredibly well against Iron Man and Doctor Strange."

Eventually, Iron Man and Spider-Man would outsmart Maw during their daring outer-space rescue of Doctor Strange, leading to his demise.





MEINERDING ▲ TOP PRODUCTION STILL · BOTTOM MEINERDING ▲

▲ **BURT**

▲ TOP **BURT**; BOTTOM **MEINERDING**

▲ **MARANTZ**

TOP **PRODUCTION STILL**; BOTTOM **MANDRADJIEV** ▲

Proxima Midnight deftly wields her spear against any who oppose her. Filmmakers carefully adapted the female warrior's comicbook design for the big screen, making certain she had her own distinct look. "In the comics, Proxima has a helmet that has these large, black winged fins on either side of her head," Concept Artist Wesley Burt says. "My early ideas for that were revolving around different helmet designs, but to help differentiate her from Hela's design and shape language in *Ragnarok*. Her helmet fins began to be a part of her head, which also helped reinforce that she was a different alien species we haven't encountered yet in the films.

"From there, I tried to have a wide range of head-design ideas that played with different degrees of human to alien features. Some of them moved way further into the alien realm—with different features and more textures and less and less humanoid features—and then some moved closer to humanoid, even bringing in some of the features of the motion-capture actress. It was a fun and interesting challenge to maintain some of the softer feminine features, but also keep her feeling really strong and stoic."

Proxima Midnight ultimately fell during the Battle of Wakanda.

▲ HERMAN

▲ MARANTZ

CULL OBSIDIAN

As brutish as he is big, Cull Obsidian is a creature of few words, preferring his fists do the talking.

"For Cull Obsidian, working on that head was a lot of fun," Ryan Meinerding says. "There's so much texture. There's so much fun stuff in the comic design, and trying to translate that to film becomes about how far you want to push it—how monstrous—and coming up with a design that feels like a reasonable creature. It doesn't feel overly scary. It doesn't feel overly demonic. It still has a life that sits firmly in the MCU, and that was a lot of fun to do."

During the Battle of Wakanda, this savage child of Thanos would not be defeated by the incredible strength of the Hulk, but rather by the Hulk's unassuming alter ego, Bruce Banner, who was piloting the Hulkbuster suit.

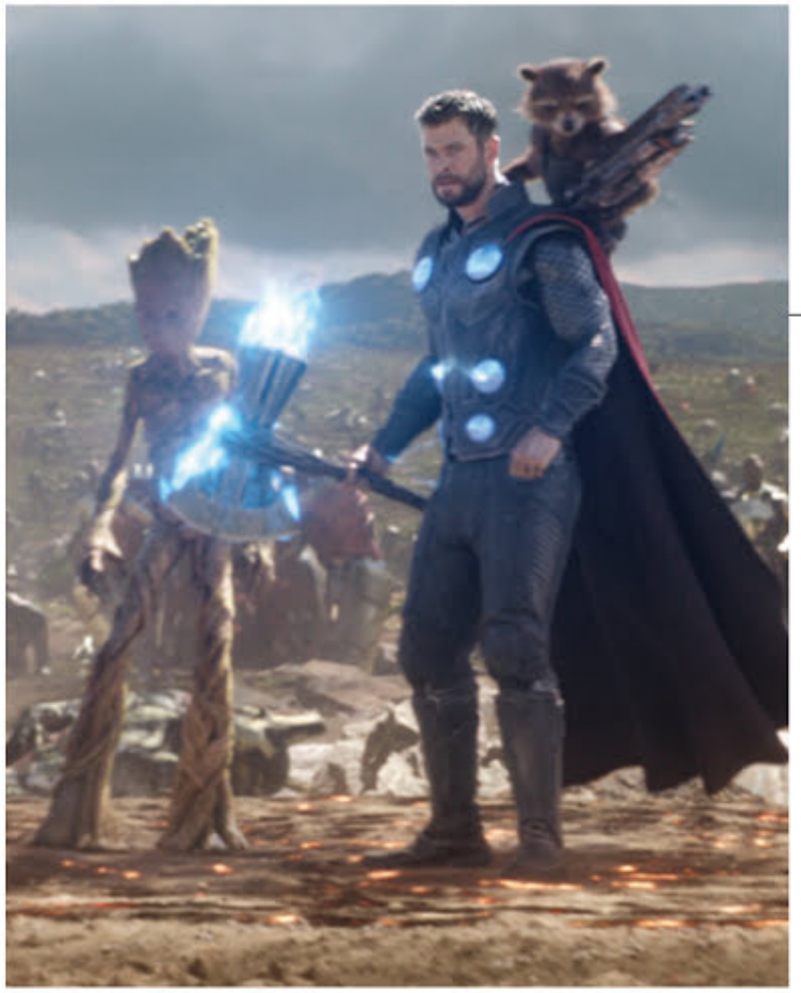
MEINERDING ▲

PRODUCTION STILL ▲

▲ BURT

▲ HERMAN

Corvus Glaive is the group's tactical expert, appropriately wielding his namesake glaive. "Of all the Children of Thanos, Corvus was probably kept the closest to the comics version from a pulled-back design standpoint," Burt says. "The shapes and value breakdowns translated easily, and then it was more about the fine details for his film interpretation. His hood and the metal pieces on the sides of his head are pretty iconic to his character design, so I made sure to do a variety of realistic approaches to those—coming up with ways that the floating metal pieces in comics form could actually be held in place on a framework that wraps inside the hood and then around his head. For his face, it was important to try to reflect the comics version, but also not to have him feel like some sort of space vampire. A lot of attention was then focused on the features and expressions and different ways to have him feel like an alien species. I also worked on a variety of different hood designs and textile ideas for how it might look in terms of shape and even how it would hang on his head."



▲ TOP LEFT **STAUB**; TOP RIGHT & BOTTOM LEFT **PRODUCTION STILL**; BOTTOM RIGHT **MEINERDING**

THE AVENGERS

Although the Avengers and their allies defeated Thanos' soldiers, Thanos was successful in his mission. The heroes fell, one after another. "They weren't together. It becomes clear that the team breaking up is probably a big reason why they lost," Ryan Meinerding says.

With a single snap, the Mad Titan instantaneously eradicated half of the universe's population—including members of the Avengers and Guardians of the Galaxy. "We will see the ramifications of what Thanos has done in, I think, unexpected ways and lead into what truly becomes the finale of all of Phase One, all of Phase Two, all of Phase Three of the MCU—an ending to 22 consecutive films in one singular narrative," Executive Producer and President of Marvel Studios Kevin Feige explains. "That's what *Avengers: Endgame* is all about: bringing to a conclusion the storylines of these characters that have gone back for the past ten years."

One fact is certain: The snap's survivors will have to reunite and work as one to defeat Thanos.

▲ TOP **SAUNDERS**; BOTTOM **PRODUCTION STILL**

▲ **SAUNDERS**

IRON MAN

TONY STARK

"Tony Stark might be the godfather of them all," Vice President of Marvel Studios Louis D'Esposito says. "And they need him—his intelligence, his drive—to solve the problem from *Infinity War*. In *Endgame*, we have a problem, obviously. There's a lot of Avengers who are no longer with us."

▲ TOP **SAUNDERS**; BOTTOM **GRANOV**

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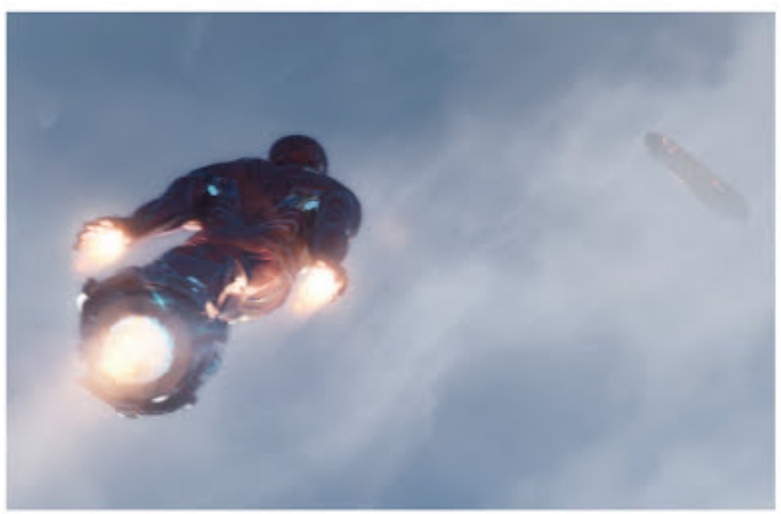
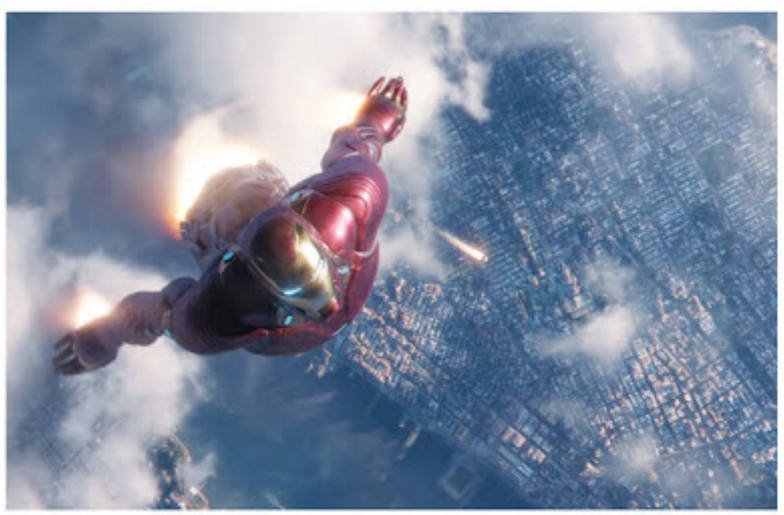
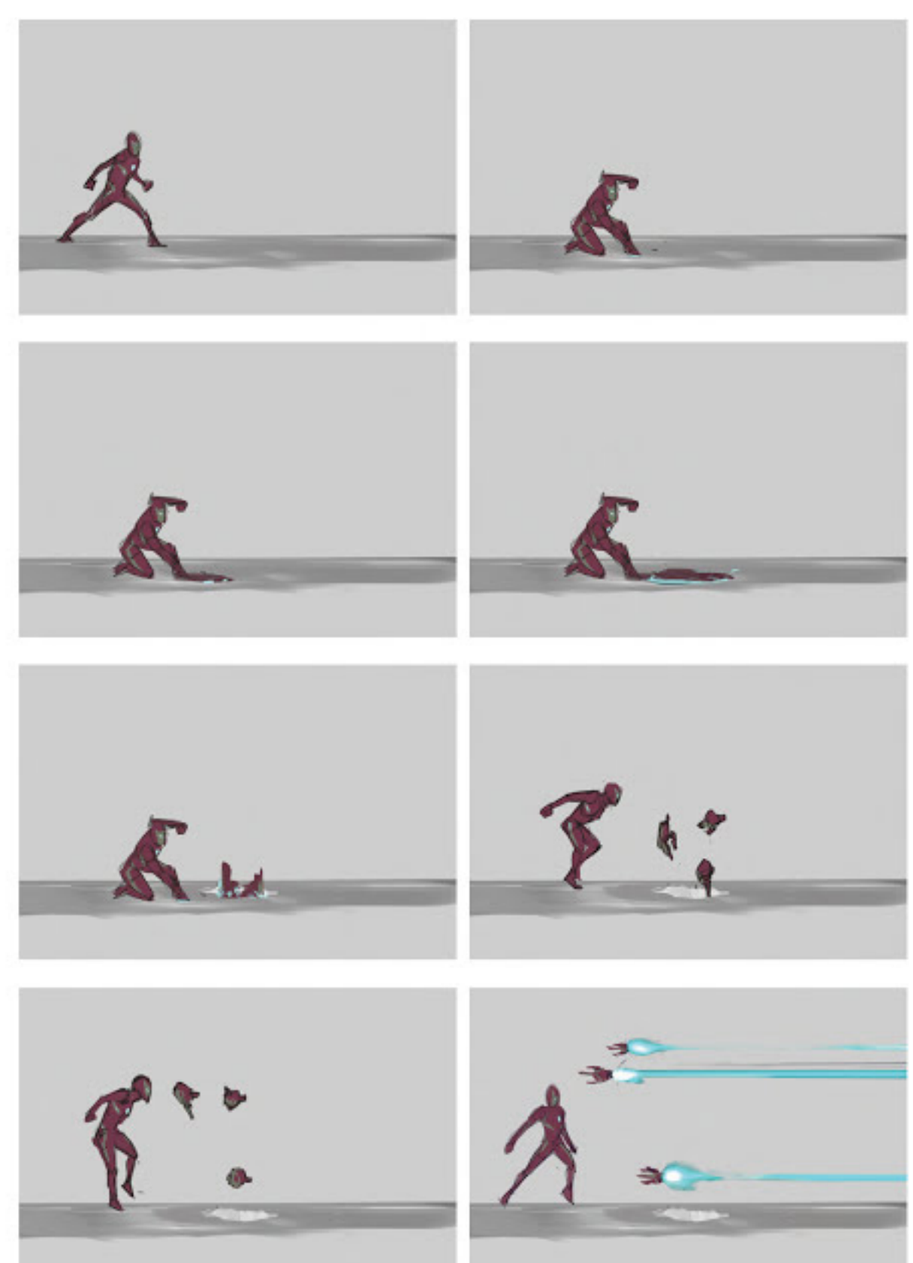




TOP **SAUNDERS**; MIDDLE & BOTTOM **PRODUCTION STILLS** ▲

TOP **GRANOV**; BOTTOM **BURT** ▲

Tony Stark's latest Iron Man armor is powered by nanotech. "With this new Iron Man suit, the challenge was that he can pretty much create any weapon and shape to do whatever he needs," Senior Visual Development Artist Rodney Fuentebella says. "I wanted the technology to be something unique not only to Iron Man, but also to anything seen in the MCU. Being able to create these ideas of the suit and what it can do is such a fun design challenge."



CAPTAIN AMERICA

S T E V E R O G E R S

With the deaths of his childhood friend Bucky Barnes and newfound ally Sam Wilson, Captain America—the man who doesn't trade lives—finds himself at a loss. "I think it's definitely one of Cap's lowest points," Ryan Meinerding says. "At the beginning of *Infinity War*, he's still trying to be the hero and the soldier and the Super Hero that he needs to be. It feels like he held to his principles, and it cost him a lot. I don't think he would go back and change the decisions he made, but I think paying the price for those in a big way is going to take a toll on him."

▲ PRODUCTION STILL

▲ MEINERDING

BLACK WIDOW

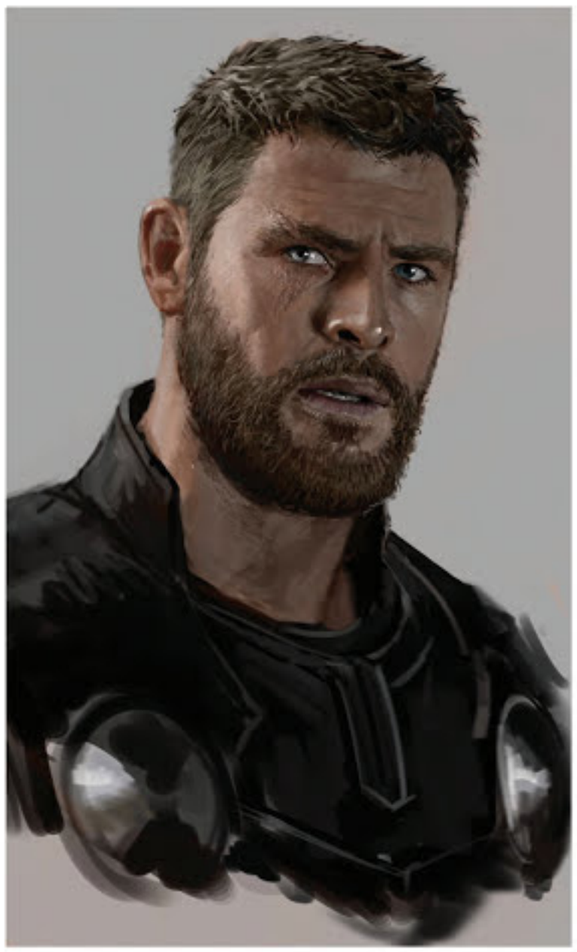
NATASHA ROMANOFF

We can be certain Natasha Romanoff will once again sport a sleek and practical design as she helps undo the damage from Thanos' snap. "She's the spy," Marvel Studios Visual Development Director Andy Park says. "Her look is a mix between her early spy days and the Russian KGB mixed in with S.H.I.E.L.D., and then post-S.H.I.E.L.D. The looks are still similar, but I think that's just her taste."

ROAD TO AVENGERS: ENDGAME

PARK ▲

PRODUCTION STILL ▲ LEFT PRODUCTION STILL ; RIGHT PARK ▶



TOP LEFT **MEINERDING**; TOP RIGHT **PRODUCTION STILL**; BOTTOM **STAUB** ▲ **MEINERDING** ▶

THOR

For *Avengers: Infinity War*, Thor's look was modified once again. "The designs of Thor that Charlie [Wen] was doing from the beginning were always really cool, high-tech looking, mixed with his comics-accurate look," Ryan Meinerding says. "When he got to *Thor: The Dark World*, that armor felt like an aesthetic that was really solid for Asgard and really solid for Thor, and it was successful enough to carry it through into *Avengers: Age of Ultron*. When they got to *Thor: Ragnarok*, there was definitely a notion of, 'How can we do something different?' And I think Andy [Park] and the team on that one really delivered on making him feel different and unique. When we got to *Infinity War*, there's a couple of things that went into it.

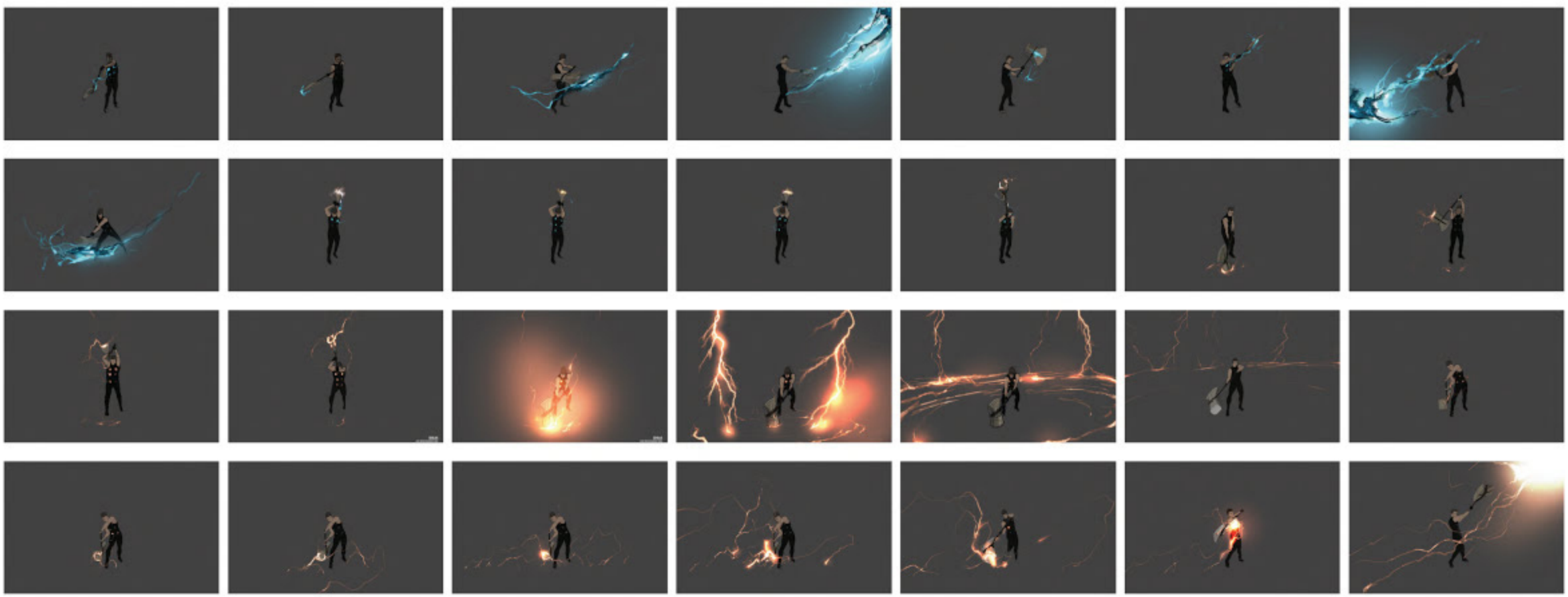
"First of all, him still having his short hair definitely defines a newer look for Thor. It still places him in a time having just come out of *Ragnarok* and feeling the weight of what happened to him in that film, but within a Russo brothers movie there's always a sense of desaturating and making things darker. So maybe the black chest piece with the black circles was really about representing a dark time for him, but it is also stylistically just what the Russos seemed to like too. They like keeping things simple and desaturating them."

During *Avengers: Infinity War*, Thor journeyed to Nidavellir with Rocket and Groot to obtain a weapon capable of killing Thanos: Stormbreaker. Groot heroically sacrificed his own limb to help form a handle for the super-powered ax. "Using the gag of Groot essentially being an adolescent who isn't engaging with anyone in the entire movie as a setup for the payoff of him stepping up and saying, 'No, I'm going to help Thor, in this moment was a great, great payoff," Meinerding says.

PRODUCTION STILLS ▲

TOP ROSS ▲ MIDDLE & BOTTOM MEINERDING ▲

"They decided to make the discs glow at the end when Thor was fully powered up with Stormbreaker," Meinerding says. "When he gets Stormbreaker made for him, the notion of it giving him a sense of who he is again—because he's fulfilling a mission he feels is very important—and that drive being represented in some of the grandeur coming back to his costume, I think is a cool thing we did."



▲ TOP LEFT & BOTTOM **FUENTEBELLA** ▲ TOP RIGHT **PRODUCTION STILLS**

Unable to call upon the Hulk's power for the Battle of Wakanda, Bruce Banner fought in Tony Stark's Hulkbuster armor instead. What does this growing dichotomy between man and monster mean for the future? "Hulk in *Thor: Ragnarok* was definitely more of a full-fledged character," Ryan Meinerding says. "He was not just the rage monster that he's been in the comics and what he'd been in the movies so far. He was allowed to actually have some comedic moments. He was allowed to have actual lines of dialogue, and that sort of character growth means he clearly has a consciousness and wants to exist on his own. It makes that conflict between him and Banner almost feel more real to me. It's not just that the Hulk is all the rage pent up in Banner and solidified into a giant green monster—it's literally that that green monster now has thoughts and feelings and drives and desires of his own. Having seen that and understanding that Banner can't just control him at will, I think it's exciting to see how that gets resolved."

WAR MACHINE

JAMES RHODES

After a crippling back injury in *Captain America: Civil War*, it seemed James "Rhodey" Rhodes would never again wear the War Machine armor—but thanks to advancements in Stark technology, he was able to join the fight against Thanos. Now, as one of the snap's survivors, he will lend his skills once again as our heroes work together to defeat Thanos.

Rhodey's War Machine armor has a practicality built into its design that Iron Man's suit doesn't. "While Iron Man has a huge complement of weapons in the Mark 50 that grow and emerge, I wanted War Machine to have an equal array of weapons, but not appearing magically with nanotech," Concept Artist Phil Saunders says. "I wanted everything to have a space in the real world with this design as a contrast to Iron Man. Also, the design is very fast, specifically because we were going so organic with Iron Man that we really wanted to contrast the silhouette of War Machine with something much plainer and more angular. I wanted to have all the weapons fold out in real space so, so that it's something you could actually replicate in real life. Then you would be able to make a toy where the rocket launchers and guns actually fold out the way they would in the movie, rather than it being all constructed in an impossible way with VFX."

PRODUCTION STILL ▲

▲ PRODUCTION STILL

▲ SAUNDERS

SAUNDERS
4·28·16

PRODUCTION STILL ▲

WEN ▲

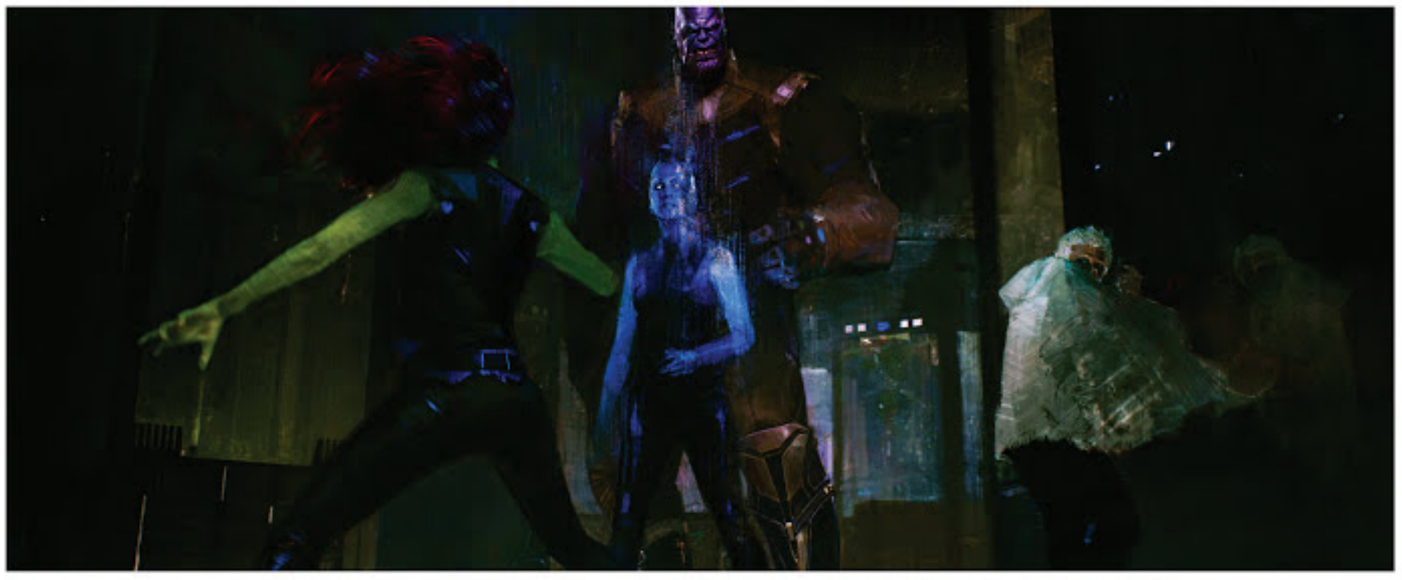
ROCKET

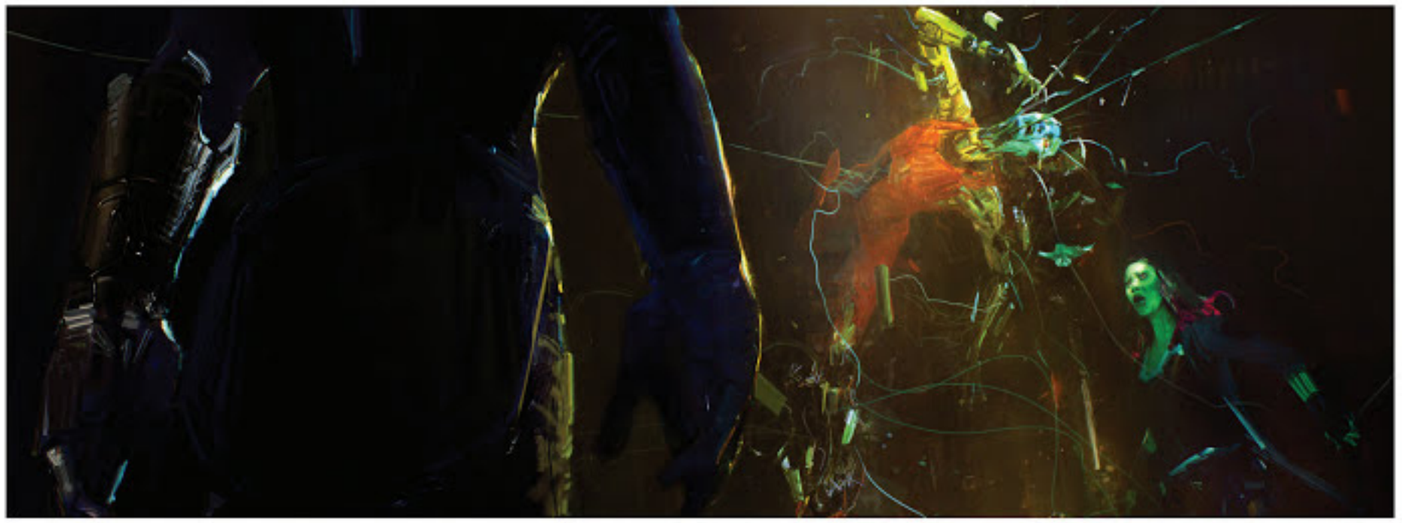
Rocket is the last surviving member of the Guardians of the Galaxy—although he doesn't know it yet. He only knows that Groot is gone. "I imagine Rocket, besides being extremely heartbroken, would be doing anything he can to try to get Groot back," Senior Concept Illustrator Jackson Sze says.

Rocket's design for *Avengers: Infinity War* was carried over from his previous on-screen appearance. "Charlie Wen did the initial design for Rocket. In *Guardians of the Galaxy Vol. 2*, they wanted a more rock 'n' roll feel for the Guardians, so Rocket got a different kind of treatment for his costume that moved away from a more utilitarian jumpsuit and incorporated more leather and metal."

▲ TOP **FINAL PRODUCTION PROPS**; BOTTOM **EAVES**

▲ **SZE**





NEBULA

"Nebula was created to be an efficient killing machine," Andy Park says. "She was essentially ripped apart and reconstructed both physically and psychologically by Thanos to be able to do his bidding. Then you have that family dynamic—that horrible father in Thanos and always playing second fiddle to Gamora, the favorite sister who is an even more efficient killing machine. So she's got a sad history.

"I think Nebula's story is just so interesting because she has turned into a very complex villain. In the first *Guardians*, she was portrayed as angry. But then in *Guardians Vol. 2*, you see more of the psychology of what Nebula has gone through—her history with Thanos and Gamora. She eventually has a reconciliation moment with Gamora and learns how to become a team member rather than just a solo assassin."

Those family dynamics became even more complicated during *Avengers: Infinity War* when Gamora revealed the Soul Stone's location to Thanos to stop him from torturing Nebula. This act ultimately led to Gamora's death at the hands of their father. "There is a true love between the sisters," Park says. "And despite her horrid past, Nebula still has it within her to love. Now she's hell-bent on avenging her sister. So in essence, she herself is becoming an Avenger."

TOP MANDRADJIEV ▲ PRODUCTION STILL ▲ PRODUCTION STILL ▲

◀ CORDELLA ▲ PARK

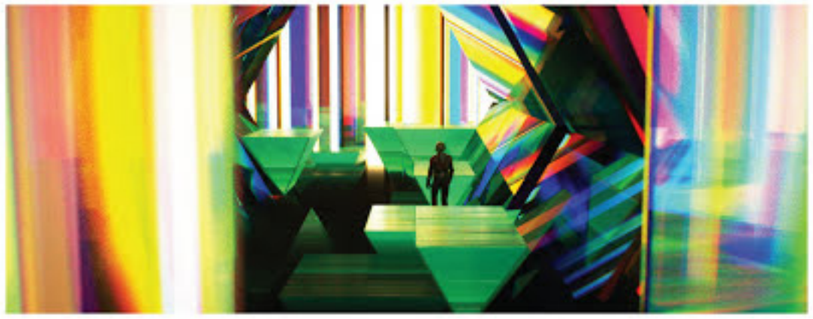
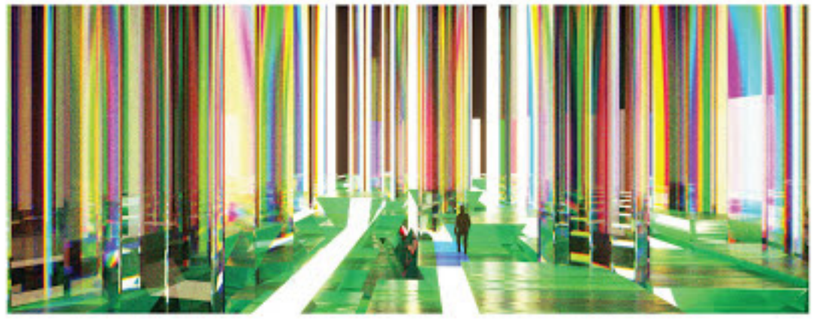
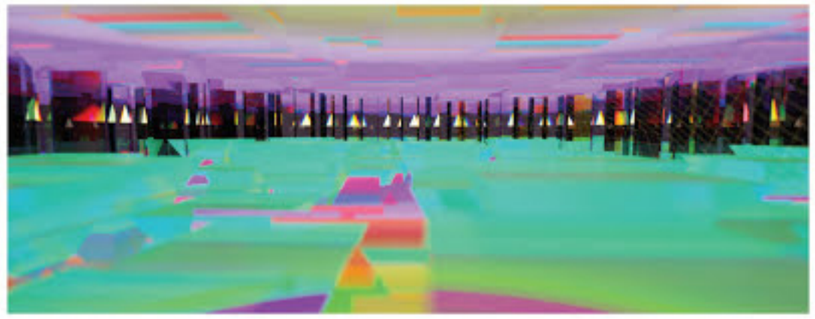
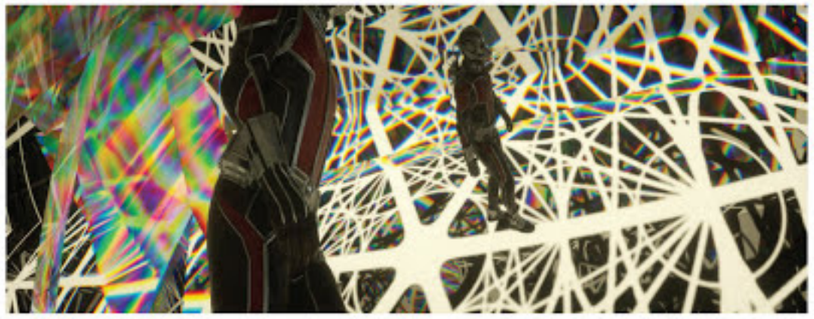
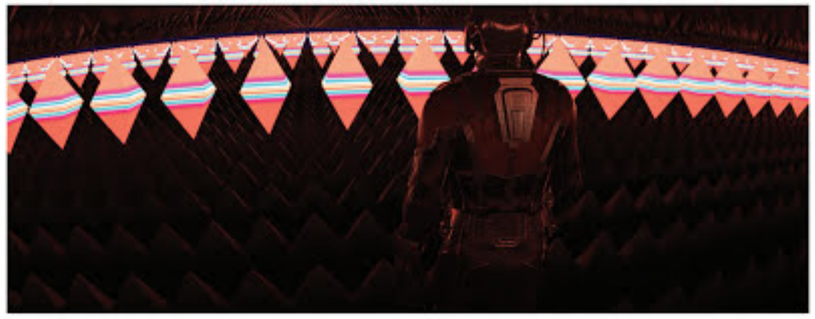
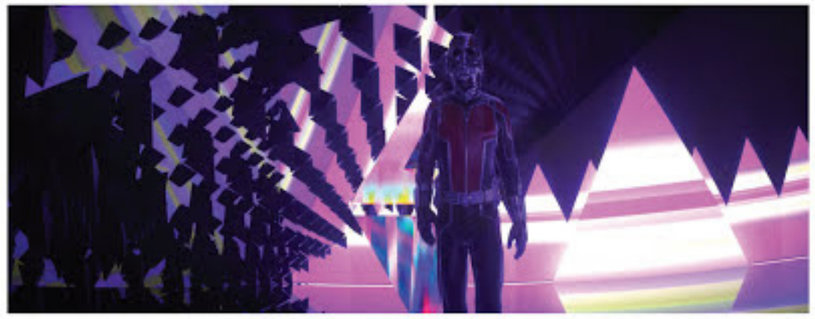
HEROES RETURN

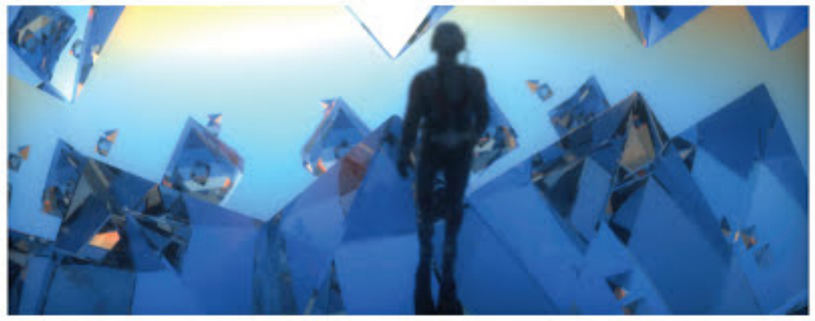
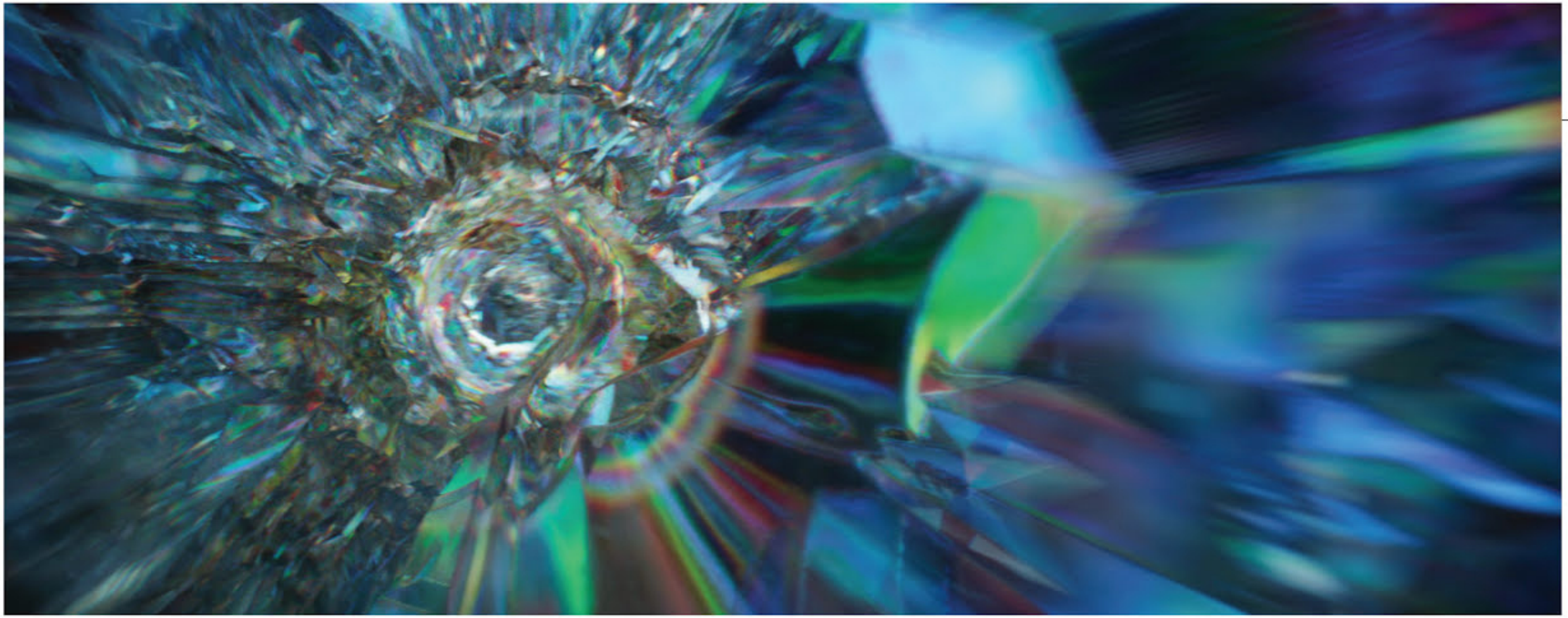
Even though the cast of *Avengers: Infinity War* was massive, not every MCU hero made an appearance. Deciding who would join the fight against Thanos was a major challenge for filmmakers. "From a story point of view, everyone has to have their time, and they have to have enough time on-screen—otherwise we will disappoint someone," Executive Vice President, Production Victoria Alonso says. "And the whole idea was we don't want to disappoint anybody because this is an Avengers movie, but we've had more characters in this movie than we've ever had before. It was a constant balancing act of, 'So if we give this to this character, what happens to this character, and where do I take it away?' And 'Is it going to end up being a three-and-a-half-hour movie?'—which was not a possibility to begin with."

Hawkeye and Ant-Man were not part of the fight to save the universe, but that all changes with *Avengers: Endgame*. "On top of all the surviving heroes, we'll have Hawkeye and Ant-Man join, as well as Captain Marvel," *Avengers: Infinity War* and *Avengers: Endgame* Executive Producer Trinh Tran says. "So we'll have new characters introduced in *Avengers: Endgame* that will create this team."

PRODUCTION STILL ▲

PARK

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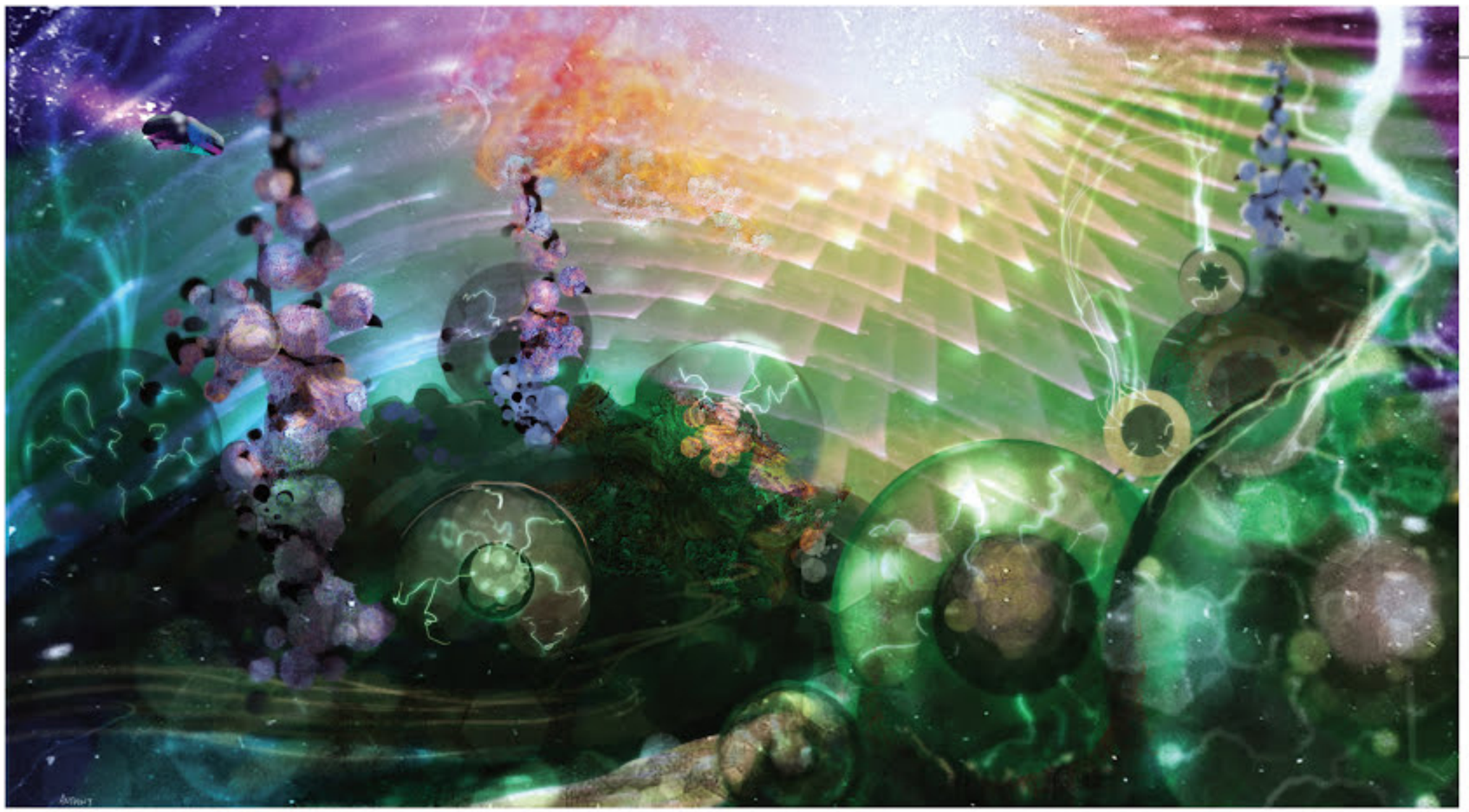
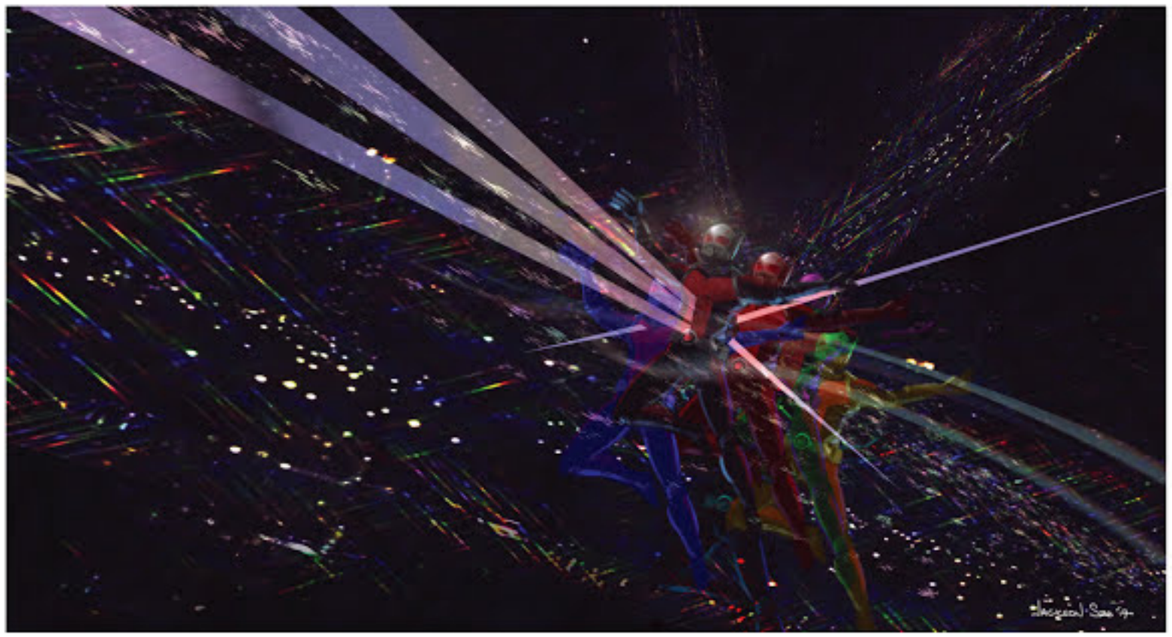


"Scott goes to the Quantum Realm and gets stuck," Park says. "We're not sure how he's going to come back. In the trailer, we can see he escapes the Quantum Realm somehow. But the big question is, when he comes back, what is the world he comes back to? The world he's been building throughout his journey—his family—is in jeopardy. What is Scott Lang's world after he escapes from the Quantum Realm? Who survived the snap?"

TOP **FRANCISCO**; BOTTOM **SZE** ▲



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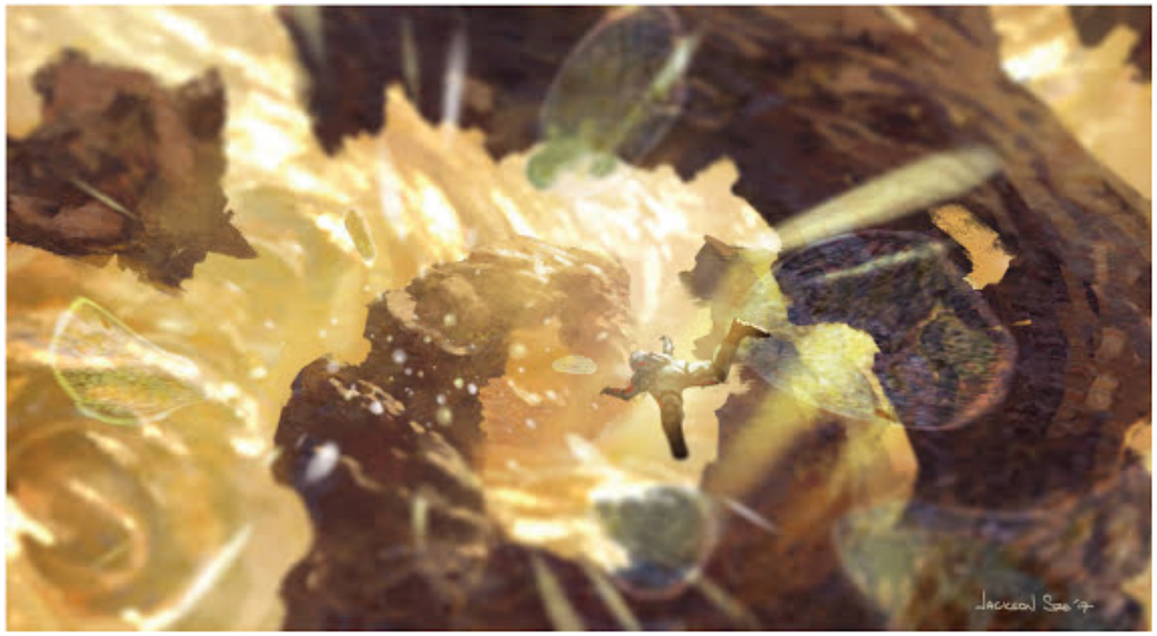


TOP LEFT **SZE**; TOP RIGHT **PRODUCTION STILL** ▲ **SZE** ▲ TOP **SZE**; BOTTOM **PRODUCTION STILL** ▶

JACKSON SZE '18

CAPTAIN MARVEL

CAROL DANVERS

ROAD TO AVENGERS: ENDGAME PRODUCTION STILL ▲

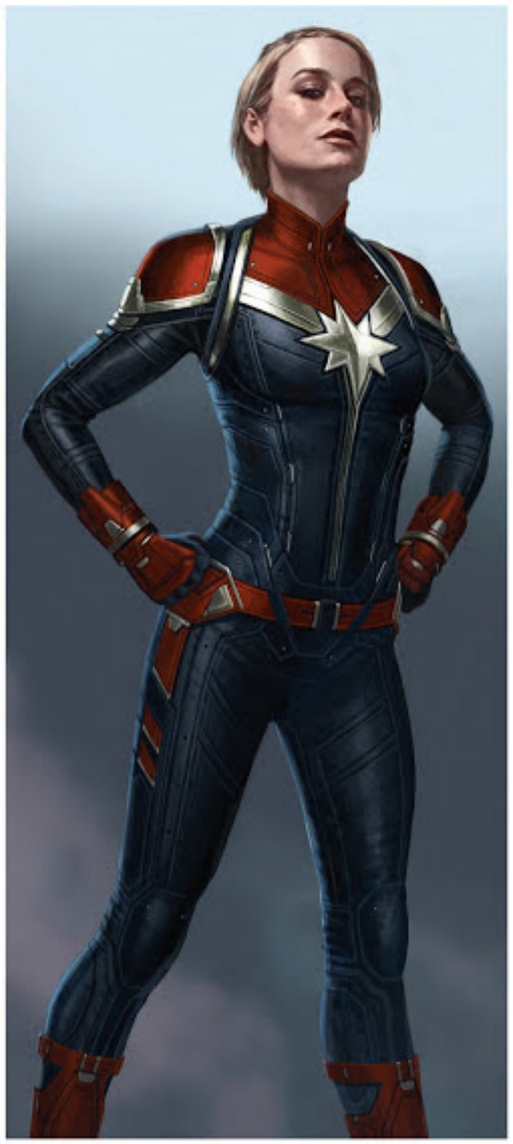
TOP, CREW GIFT PIN, **PARK**; BOTTOM **SUMMERS** ▲

"*Infinity War* ends on such a dour, sad, depressing note for everybody, and this is the first time we've ever created this type of ending—meaning our villain wins," Executive Producer Trinh Tran says. "Half of our heroes are gone; it was really just hopelessness. We wanted to make sure we left with a little bit of a hopeful ending.

"We decided to create a tag scene and introduce some of our characters that we haven't seen in a little bit—Nick Fury and Maria Hill—have them come in and just sort of realize that, 'Oh, no, Wakanda's being attacked.' So they're at that point where they're realizing that this has all happened and Hill starts disappearing. Fury goes and grabs the pager and presses the button before he slowly starts disappearing, and it drops to the ground.

That hopeful ending was the tease of a hero who had yet to enter the MCU. "We really wanted to set the anticipation of, 'Oh my God, who did he just contact?' And it's the Captain Marvel sign," Tran says. "We wanted to give everyone sort of that hope that there's somebody out there."

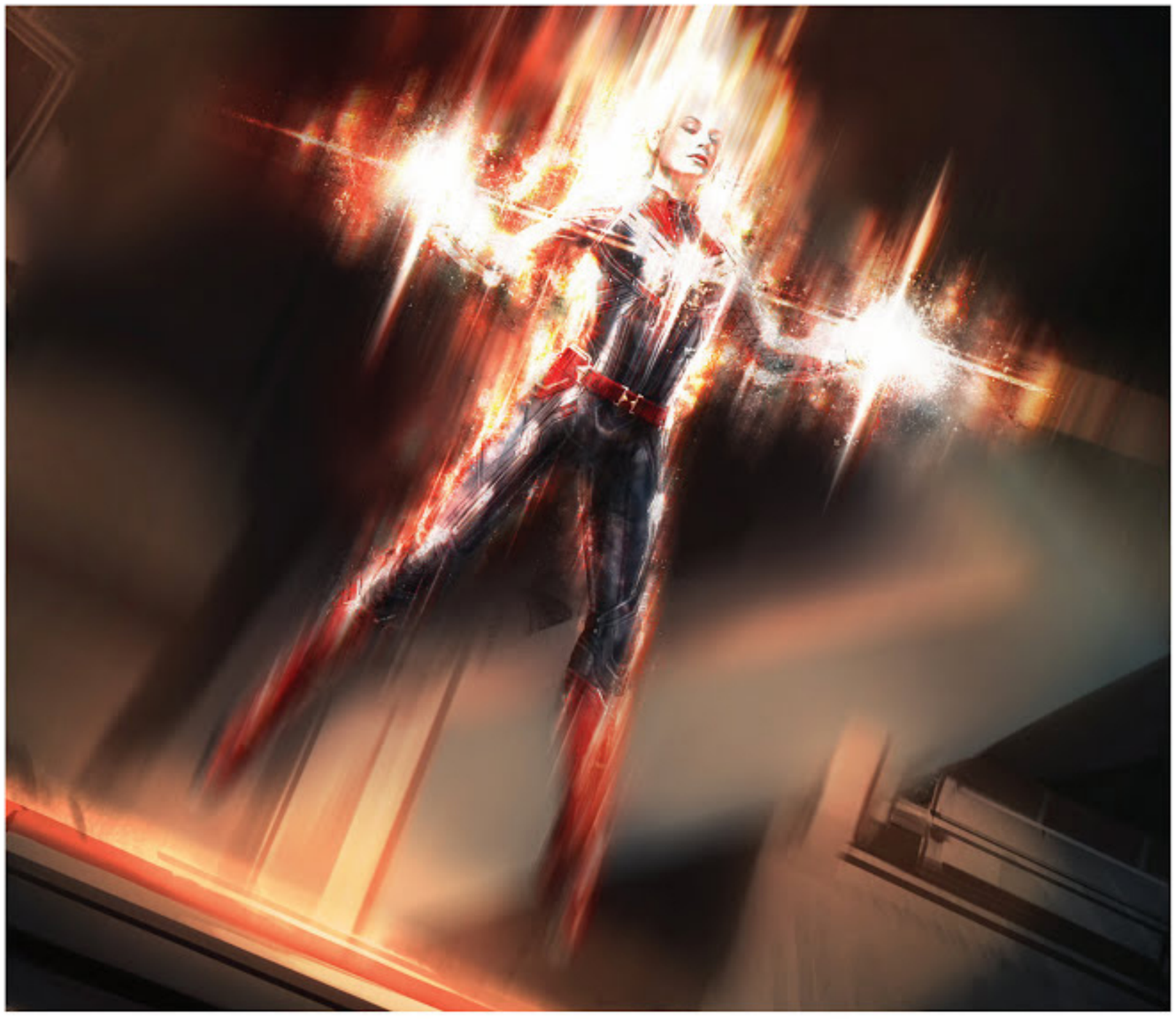
PRODUCTION STILL ▲



▲ TOP **SCHIRLE** ▲ **PARK** ▲ **PARK** **PARK** ▲ ▶

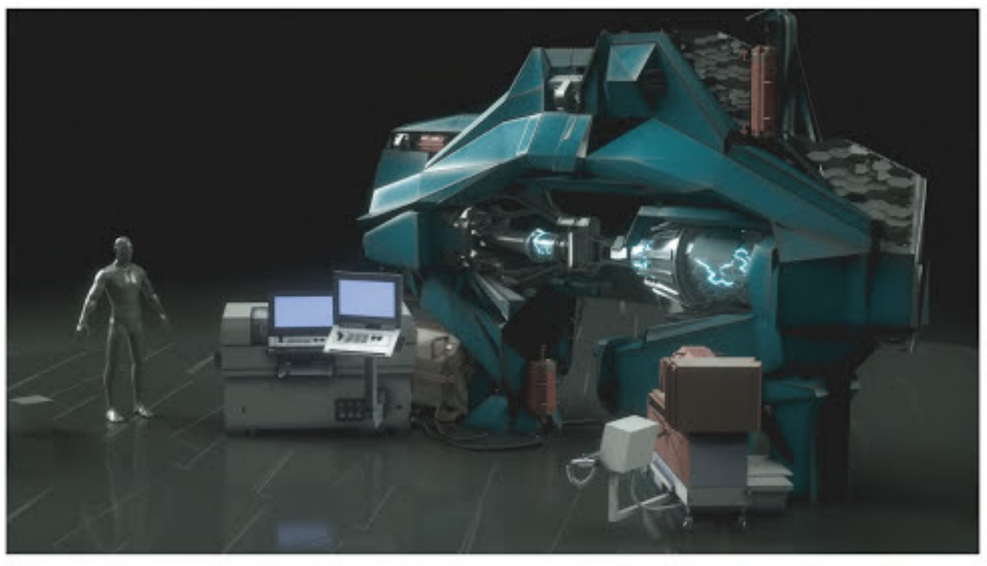
Captain Marvel—A.K.A. Carol Danvers—is one of the strongest characters in the MCU. "Captain Marvel's whole power set is very unique," Director of Visual Development Andy Park says. "We've established so many characters up to this point after ten years of the Marvel Cinematic Universe, but we never had a character like Captain Marvel. She's touted to be one of the most powerful Super Heroes—and in a lot of ways, the most classic, comic-book-y kind of character. She can fly. She's invulnerable. She can shoot photon blasts out of her hands. And it's not because of some technology or because she's wearing armor."

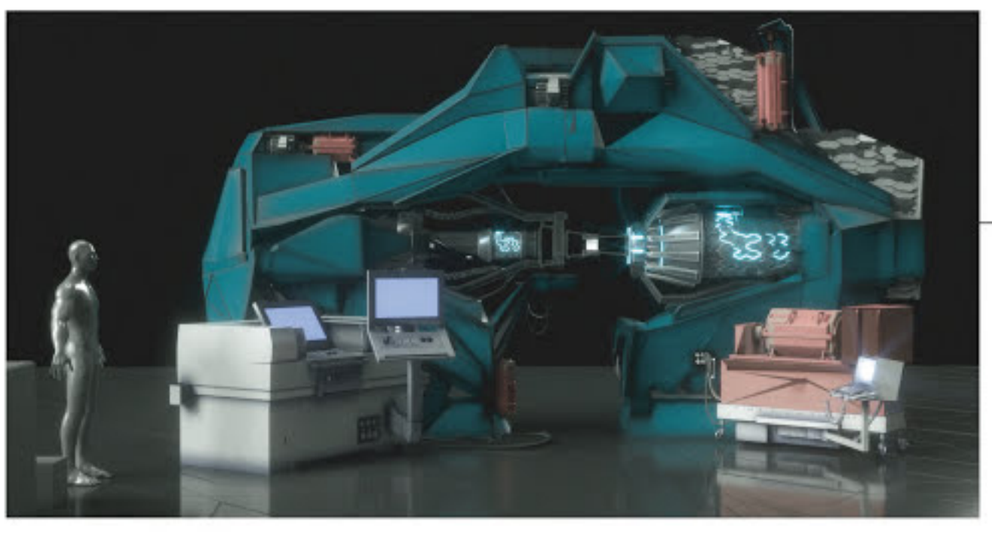
When fully powered, Captain Marvel goes binary—depicted with bright energy wrapping around and seemingly surging from her body.



▲ PARK

▲ PRODUCTION STILL



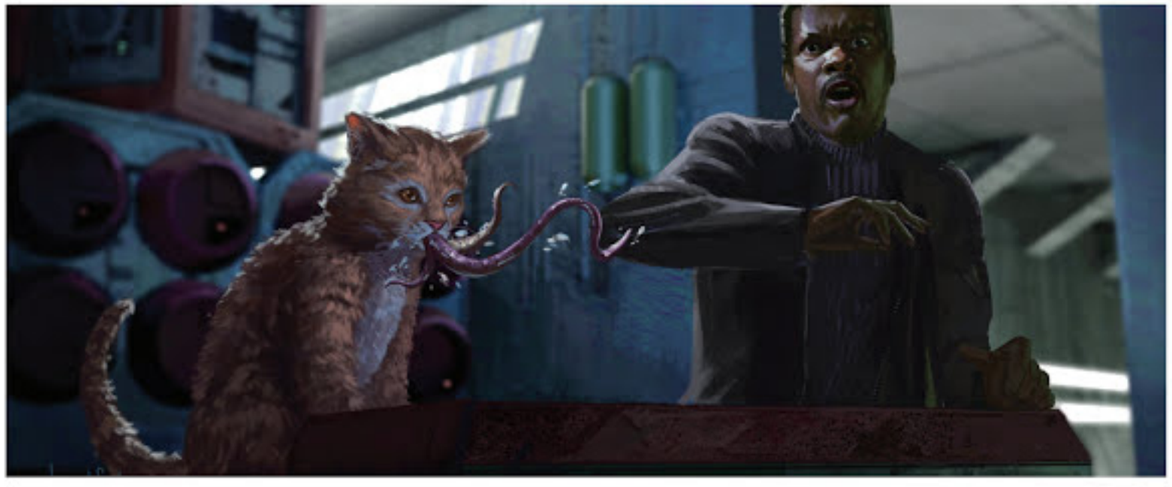


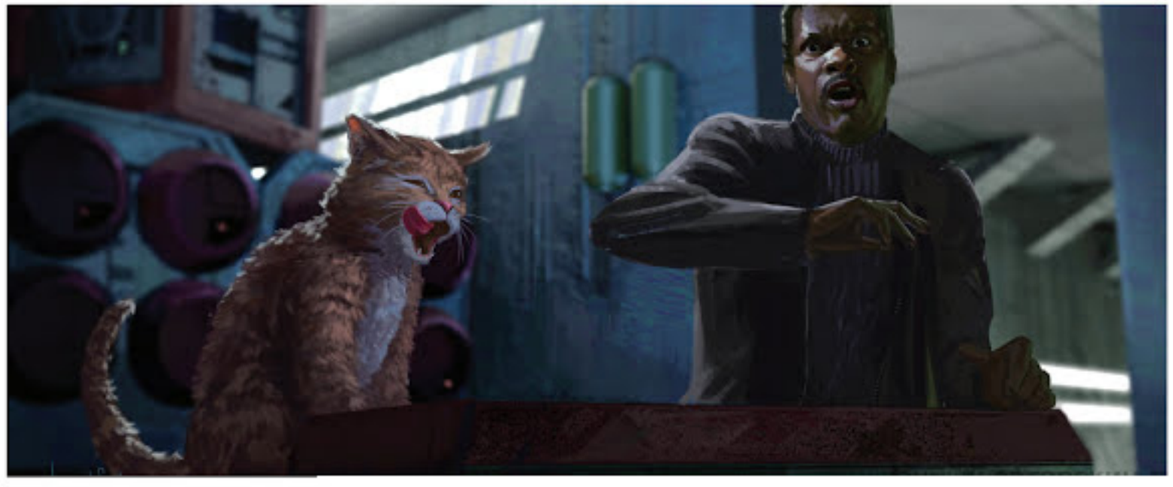
The Kree and Skrulls have been at war for centuries, and the Tesseract has the ability to end the bloodshed once and for all. Inside the ship of scientist—and secret Kree—Dr. Wendy Lawson is evidence of her experiments. "The idea was that the laboratory is all part of experiments toward making a faster-than-light ship," *Captain Marvel* Production Designer Andy Nicholson says. "And these machines are all part of that. We're never specific as to what any of these do. It's all about finding a way to contain and store the energy that's in the Tesseract."

CAMPBELL ▲

DUNLEAVY ▲ TOP LEFT CARRIO · TOP RIGHT PRODUCTION STILLS ▲

Jackson Sze '17





"Carol's mentorship under Yon-Rogg, the Jude Law character, is actually manipulating her into fighting a war for them—and manipulating her into believing that her power doesn't really come from her and that it's best used in the service of something else, something higher, like a war against the Skrulls," *Captain Marvel* Executive Producer Jonathan Schwartz says. "Really, she's much more powerful than they ever imagined. And all of this training and all of this mentorship has been about making her into a weapon, which is not the best expression of the Carol Danvers character and not necessarily the right thing to be doing. Carol has a big awakening about Yon-Rogg and about the Kree over the course of this movie and realizes she's been on the wrong side of this war and that in fact the Skrulls are the people she should've been fighting on behalf of."

▲ TOP FRANCISCO ▲ SCHIRLE

Jackson Sze

Avengers: Endgame is the culmination of an incredible, decade-long ride—but that doesn't mean the studio and its filmmakers will stop the amazing storytelling audiences have come to know and love. "To tell a story that really is the end of this saga, *Infinity War* and *Endgame* — to tell a satisfying story — it puts so much pressure on us here at Marvel," Co-President of Marvel Studios Louis D'Esposito says. "We don't want to disappoint the fans. We don't want to disappoint ourselves at all either."

"I hope in ten years' time that we continue to tell good stories,"Executive Vice President, Production Victoria Alonso says. "And I'm hoping that people around the world are inspired and they're happy to see what we have to say. People say all the time that these are popcorn movies, and people don't think those movies can actually change something. Then you realize, well, maybe it does. Maybe it can."

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Bojan Vucicevic
Dan Walker
Charlie Wen
Luke Whitelock
Billy Wilson
Brad Winderbaum
Charles Wood
Kevin Wright
Kristin Zelazko

▲ MEINERDING

CREATOR BIOGRAPHIES

CONCEPT ARTIST ADI GRANOV works as an illustrator and designer, primarily for Marvel. His most notable works include the *Iron Man: Extremis* series, written by Warren Ellis, and his role as a conceptual designer and illustrator on the *Iron Man* films and *Marvel's The Avengers*. He worked on key character designs and created keyframe illustrations for the action sequences. For comics work, he is currently under an exclusive contract with Marvel and has produced covers for multiple series over the last few years, as well as a number of short interior stories. Adi currently lives in England with his wife, Tamsin, and their two very weird cats. He likes airplanes, trains, and cars, and his main hobby is working on his 1967 Lotus Elan. He also enjoys beekeeping.

CONCEPT ARTIST ALEKSI BRICLOT develops characters, universes, and stories through images. He previously worked on comic books released in the European market as well as some U.S. comic books (two *Spawn* graphic novels for Todd McFarlane), including a cool project based on a true story involving killer whales. Briclot also did illustrations for book covers (R.A. Salvatore), comic book covers (Marvel's *Annihilation: Conquest*, *New Avengers*), and several cards illustrations (*Magic: The Gathering*, *Hearthstone*). He especially enjoys working on *Magic: The Gathering*. The first six Planeswalkers he created for the game are still considered fan-favorites. Additionally, Briclot worked on concept arts for video games (*Splinter Cell: Double Agent*, *Cold Fear*) and thought that it would be exciting to create his own video game. So, a few years back he co-founded the studio Dontnod Entertainment, which produced *Remember Me* and *Life Is Strange*. Then it was time to go back to his childhood dream: the movie industry! For Marvel Studios, Briclot has worked on *Thor: Ragnarok*, *Ant-Man and the Wasp*, *Captain Marvel*, and *Avengers: Infinity War* and continues to support upcoming projects for Marvel Studios.

DIRECTOR OF VISUAL DEVELOPMENT ANDY PARK studied as an art/illustration major at both UCLA and ArtCenter College of Design. His career began as a comic book artist, fulfilling a childhood dream and illustrating such titles as *Tomb Raider*, *Excalibur*, and *Uncanny X-Men* for Marvel, DC, and Image Comics, among others. After a decade in the comic book industry, he made a career switch and began working as a concept artist in video games. He was one of the leading artists designing the various worlds and fantastical characters/creatures of the award-winning *God of War* video game franchise for Sony Computer Entertainment of America. Park joined the Visual Development Department at Marvel Studios in 2010 as a visual development concept artist, designing characters and keyframe illustrations for *Marvel's The Avengers*, *Iron Man 3*, *Captain America: The Winter Soldier*, *Thor: The Dark World*, *Guardians of the Galaxy*, *Avengers: Age of Ultron*, *Ant-Man*, *Captain America: Civil War*, and *Guardians of the Galaxy Vol. 2*. He is currently the Director of Visual Development and has led the department on several films, including *Guardians of the Galaxy Vol. 2*, *Thor: Ragnarok*, *Ant-Man and the Wasp*, *Captain Marvel*, and other unannounced projects.

SENIOR VISUAL DEVELOPMENT ARTIST ANTHONY FRANCISCO has worked as a concept artist/art director, designing for film and video games for eighteen years. He is currently a senior concept artist at Marvel Studios Visual Development. He is best known for designing one of Marvel's cutest characters, Baby Groot! Other iconic characters include Loki for *Thor: Ragnarok* and the costumes for the *Dora Milaje* (Okoye and Nakia) in *Black Panther*. Here are a few Marvel movies he has worked on: *Captain Marvel*, *Avengers: Infinity War*, *Ant-Man and the Wasp*, *Guardians of the Galaxy Vol. 2*, *Doctor Strange*, *Ant-Man*, and *Guardians of the Galaxy*. He is currently based in Burbank and is working on various upcoming Marvel Studios projects.

FORMER CO-HEAD OF VISUAL DEVELOPMENT CHARLIE WEN has held a variety of positions in the entertainment industry, ranging from concept designer to art director, on everything from feature films to video games and animation. Wen's client list reads as a virtual who's who of the industry, including Disney, Digital Domain, DreamWorks, Legendary Pictures, Marvel Studios, Dark Horse, Rhythm and Hues, Imagi Studios, Wizards of the Coast, and Sony Computer Entertainment of America. In 2005, he created Kratos and helped establish *God of War* as a monolithic action-adventure title for Sony PlayStation. Outside the production environment, Wen has given lectures on figure drawing and character design at many distinguished studios and universities. After helping establish the main character designs in *Thor*, he held the title of co-head of visual development at Marvel Studios, working on *Captain America: The First Avenger*, *Marvel's The Avengers*, *Iron Man 3*, *Thor: The Dark World*, *Guardians of the Galaxy*, *Captain America: The Winter Soldier*, *Avengers: Age of Ultron*, and *Ant-Man*.

CONCEPT ILLUSTRATOR CONSTANTINE SEKERIS has worked in the practical FX Studios such as Steve Johnson's Edge FX, Stan Winston Studios, Rick Baker's Cinnovation, Greg Cannom's Drac Studio, Quantum Creation FX, Ironhead Studio, and Spectral Motion on many films such as *Bicentennial Man*, *Blade II*, *The League of Extraordinary Gentlemen*, *Where the Wild Things Are*, *Spider-Man 2* and *3*, *Fantastic Four*, *Hellboy 2*, *The Incredible Hulk*, *X-Men: The Last Stand*, *Van Helsing*, and many more. For the past five years he has been part of the Costume Union, working on films such as *Thor*, *Thor: The Dark World*, *Green Lantern*, *Oblivion*, *Man of Steel*, *Star Trek: Into Darkness*, *G.I. Joe: Retaliation*, *Ender's Game*, *Thor: Ragnarok*, *Black Panther*, and *Avengers: Infinity War*. He has recently published a book with Design Studio Press called *MetamorFX: Art of Constantine Sekeris*.

CONCEPT ARTIST FAUSTO DE MARTINI began his career working for the advertisement industry in Brazil before transitioning to the video game industry in the United States. He then became a concept artist/illustrator in Hollywood, working alongside many amazing artists on projects like *RoboCop*, *Transformers: Age of Extinction* and *The Last Knight*, *Star Wars*: Episode VII *The Force Awakens*, *Black Panther*, *Avengers: Infinity War*, *Terminator Genisys*, and *Kingsman: The Golden Circle*. He has also been working on the *Avatar* sequels for almost four years. He has a huge passion for art and design in general and is always working on persaonal projects since he loves the creative process of coming up with worlds, props, and creatures.

SENIOR VISUAL DEVELOPMENT ARTIST JACKSON SZE has worked in advertising, video games, television, and film for studios such as Lucasfilm Animation and Sony Computer Entertainment of America. He is a founding member of the BATTLE MILK series of art books and is currently a senior concept illustrator at Marvel Studios. He has also taught at Concept Design Academy and Gnomon School of Visual Effects in Hollywood. His credits include *Star Wars: The Clone Wars*, *The Little Prince*, *Marvel's The Avengers*, *Guardians of the Galaxy*,

Ant-Man, Doctor Strange, Guardians of the Galaxy Vol. 2, Thor: Ragnarok, Black Panther, Avengers: Infinity War, Ant-Man and the Wasp, and most recently *Captain Marvel*.

CONCEPT ARTIST JERAD MARANTZ started his career at an early age interning for special FX houses. Trying a little of everything enabled him to narrow his focus to creature design, character design, and costume concept art. His acquired skills in sculpture, painting, illustration, 3D modeling, and Photoshop all aid his unique sense of design. Marantz's many credits span over the film, television, and game industries and include: *Avengers: Infinity War, Doctor Strange, Guardians of the Galaxy Vol. 1-2, Justice League, Batman v Superman, Deadpool 2, Shazam!, The Amazing Spider-Man 1-2, X-Men: Apocalypse, X-Men: Days of Future Past, Teenage Mutant Ninja Turtles, Rise of the Planet of the Apes, Noah, Clash of the Titans* (lead designer), *Sucker Punch* (lead designer), *Transformers: Dark of the Moon, Green Lantern, Snow White and the Huntsman, G.I. Joe: Retaliation, Riddick, American Horror Story, Grimm, Westworld, Gears of War 4, Titanfall, Infamous 2*, and more.

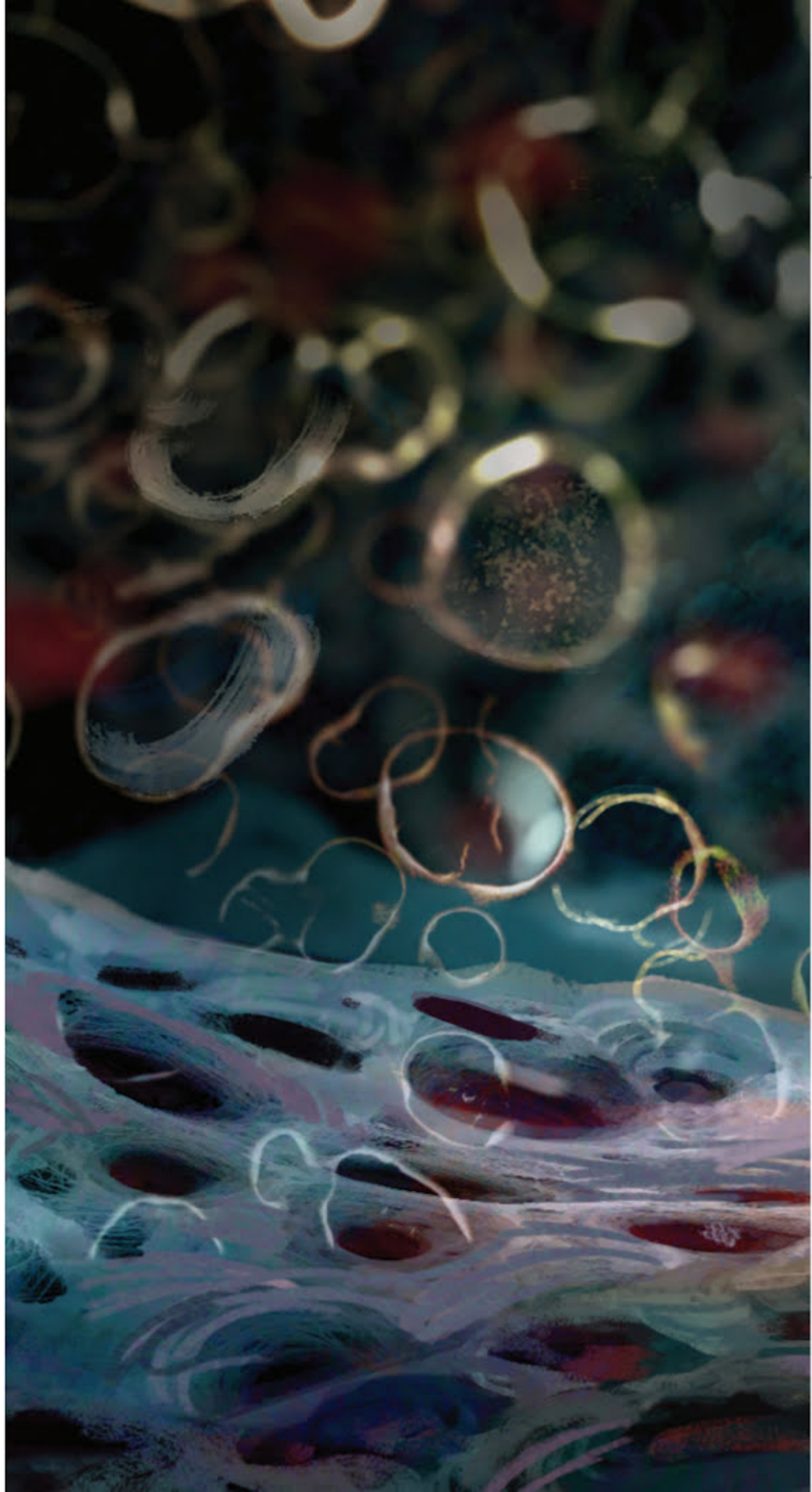
CONCEPT ARTIST JOSH HERMAN began his career working in practical effects at Legacy Effects working on movies like *Real Steel, The Amazing Spider-Man, Total Recall*, and *Marvel's The Avengers*. He left Legacy to try his hand at video games and worked for Naughty Dog on *Uncharted 3: Drake's Deception* but soon found himself back in movies and working for Marvel Studios on titles like *Iron Man 3, Captain America: The Winter Soldier, Guardians of the Galaxy, Guardians of the Galaxy Vol. 2, Avengers: Age of Ultron, Doctor Strange*, and *Spider-Man: Homecoming*. In 2016, Josh moved back to working in games as the Character Art Director for Cloud Imperium Games where he oversees the character and character concept teams on *Star Citizen* and *Squadron 42*.

CONCEPT ILLUSTRATOR JOSH NIZZI graduated from the University of Illinois with a degree in graphic design. He spent the next nine years working in video games as an art director, concept artist, modeler, and animator on games such as *Red Faction, Red Faction II*, and *The Punisher*. Since then, Nizzi has been an illustrator for feature films including *Transformers: Revenge of the Fallen, Dark of the Moon, Age of Extinction*, and *The Last Knight; Captain America: Civil War*; and *Avengers: Age of Ultron*. Recently, he has been splitting his time between his own video game projects and feature-film work.

CONCEPT ILLUSTRATOR JUSTIN SWEET has worked on *The Chronicles of Narnia: The Lion, the Witch, and the Wardrobe; Prince Caspian*; and *The Voyage of the Dawn Treader*; and *Guardians of the Galaxy Vol. 2*.

CONCEPT ARTIST KARLA ORTIZ is a Puerto Rican, internationally recognized, award-winning artist. With her exceptional design sense, realistic renders, and character-driven narratives, Ortiz has contributed to many big-budget films, including *Jurassic World, World of Warcraft, Rogue One: A Star Wars Story, Thor: Ragnarok, Black Panther, Avengers: Infinity War*, and most notably her design of Doctor Strange for Marvel's *Doctor Strange*. Ortiz's work is also recognized in the fine art world, where she showcases her figurative and mysterious art in notable galleries, such as Spoke Art and Hashimoto Contemporary in San Francisco, Nucleus Gallery and Thinkspace in L.A., and Galerie Arludik in Paris. She currently lives in San Francisco with her cat, Bady.

SZE ▶



CONCEPT ARTIST MICHAEL KUTSCHE is an award-winning German artist based in Berlin, Germany. He is a self-taught artist who works both in traditional and digital media. His work is best described as an astoundingly lifelike depiction of parallel realities, populated by odd characters reminiscent of movies and comics but also Flemish Renaissance paintings. His unique approach to imaginative character creation has led him to become a character designer on Tim Burton's *Alice in Wonderland*, *John Carter* directed by Andrew Stanton, *The Jungle Book* directed by Jon Favreau, *Oz the Great and Powerful* directed by Sam Raimi, and *Thor* directed by Kenneth Branagh, among others. Since his character design work plays a crucial role in the success of these movies, he has become one of the most sought-after character designers working in the film industry today. His work has been featured in books and magazines throughout the world, most notably in the 2011 edition of *Illustration Now!*, published by Taschen. Parallel to his career as an illustrator in the film industry, he keeps track of his own projects, including paintings for future exhibitions and book projects. Clients include Disney Studios, DreamWorks, Marvel Studios, Legendary Entertainment, Sony Imageworks, Warner Bros., Paramount Pictures, Psyop, Method Studios, SEGA, The Creative Assembly, and Saatchi & Saatchi.

VISUAL DEVELOPMENT ILLUSTRATOR PHIL SAUNDERS has been contributing his designs for characters, vehicles, environments, and props to feature films from nearly every major studio since 2001. His involvement with Marvel Studios began with the first *Iron Man* film, and has continued through almost every Marvel production that has featured the popular character. For the decade prior to his work in film, he was the creative director for computer game developer Presto Studios, an automotive designer for Nissan Design International, and a freelance designer of location-based entertainment.

SENIOR VISUAL DEVELOPMENT ARTIST RODNEY FUENTEBELLA has degrees in design from UCLA and product design from ArtCenter College of Design. Born in the Philippines and raised in San Francisco, he has worked on various projects for Electronic Arts, Atari, Rhythm and Hues, DreamWorks Animation, and *WIRED* magazine, as well as various other entertainment and commercial projects. In film, he worked as a concept artist at Rhythm and Hues before joining the Visual Development team at Marvel Studios. Fuentebella has created key-art illustrations and character designs for various projects including *Captain America: The First Avenger*, *Marvel's The Avengers*, *Iron Man 3*, *Captain America: The Winter Soldier*, *Guardians of the Galaxy*, *Avengers: Age of Ultron*, *Ant-Man*, *Captain America: Civil War*, *Doctor Strange*, *Spider-Man: Homecoming*, *Thor: Ragnarok*, *Black Panther*, *Avengers: Infinity War*, *Captain Marvel*, and numerous upcoming MCU films and projects.

CONCEPT ARTIST RYAN LANG has worked on *Doctor Strange*, *Moana*, *Guardians of the Galaxy Vol. 2*, and *Avengers: Infinity War*.

HEAD OF VISUAL DEVELOPMENT RYAN MEINERDING has been active as a freelance concept artist and illustrator in the film business since 2005. Even early in his career, his work was already drawing the kinds of raves reserved for industry veterans. After earning a degree in industrial design from Notre Dame, he transitioned to Hollywood and worked on 2008's *Outlander*. He was hired at Marvel Studios for *Iron Man* and, after leaving briefly to do concept work for *Transformers: Revenge of the Fallen* and *Watchmen*, has been full-time ever since. While working on *Iron Man 2*, Meinerding contributed the design for the new Iron Man armor in the comic book series *Invincible Iron Man*. He served as visual development

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co-supervisor on *Captain America: The First Avenger*, *Thor*, and *Marvel's The Avengers*. He then served as head of visual development on *Iron Man 3*, *Captain America: The Winter Soldier*, *Avengers: Age of Ultron*, *Captain America: Civil War*, *Doctor Strange*, *Black Panther*, and *Spider-Man: Homecoming*, and *Avengers: Infinity War*. He is currently working on *Avengers: Endgame* and *Spider-Man: Far from Home* for release in 2019 and loving every minute of it.

CONCEPT ILLUSTRATOR TULLY SUMMERS specializes in creature and character design for film and has contributed to *Tomorrowland*, *The Jungle Book*, *Passengers*, *Ghostbusters*, *Guardians of the Galaxy Vol. 2*, *Thor: Ragnarok*, and *Black Panther*.

CONCEPT ARTIST WESLEY BURT hails from a background in traditional art and design, majoring in drawing, painting, and printmaking while attending the Cleveland Institute of Art. He started working professionally as an illustrator and concept artist in 2001 with several freelance jobs with video game developers and card game studios. In 2004, he joined the small group of concept artists that would eventually be known as Massive Black, the first-of-its-kind boutique art-outsourcing studio for the video game industry. Over the following decade with Massive Black, he contributed to numerous video game titles, toys, and TV and film properties including *Fallout 3*, *Fallout: New Vegas*, *Batman: Arkham Origins*, *Silent Hill*, *Infamous* and *Infamous 2*, *League of Legends*, *Magic: The Gathering*, *Lord of the Rings Online*, *Shadow of Mordor*, *The Sims 4*, and others. He began working on more film productions with the first *Transformers* live-action movie in 2006 and other Hasbro-related titles, eventually working more in-depth on the subsequent *Transformers* films: *Dark of the Moon*, *Age of Extinction*, and *The Last Knight*. In addition, he contributed work on *Teenage Mutant Ninja Turtles: Out of the Shadows*, *G.I. Joe: The Rise of Cobra* and *G.I. Joe: Retaliation*, and several others. He has worked with Marvel Studios as a visual development artist on *Doctor Strange*, *Black Panther*, *Avengers: Infinity War*, and future Marvel films.

PRODUCTION DESIGNER CHARLES WOOD began his entertainment industry career in 1991 as a visual effects art director, working on such projects as Andrew Davis' *The Fugitive* and *Under Siege*, Sam Raimi's *Army of Darkness*, and Peter Weir's *Fearless*. Segueing to design work, he has since collaborated on projects ranging from big studio movies to independent films. His most recent credits include Marvel Studios' *Doctor Strange*, *Avengers: Age of Ultron*, *Guardians of the Galaxy*, and *Thor: The Dark World*; Jonathan Liebesman's *Wrath of the Titans*, Joe Carnahan's *The A-Team*, Andy Tennant's *Fool's Gold*, Michael Apted's *Amazing Grace*, and Tony Bill's *Flyboys*. Earlier credits include Peter Howitt's *Laws of Attraction*, F. Gary Gray's *The Italian Job*, and Stephen Kay's *Get Carter*. Wood earned an Emmy® Award nomination in 2000 for the television movie *Geppetto* and a 2007 Satellite Award nomination for *Amazing Grace*.

PROPERTY MASTER BARRY GIBBS has worked in film since 1981, when he started his career as a stagehand with model units on *Krull* and *Supergirl*, with the Rank Organisation at Pinewood Studios. He shortly moved to props, where his first jobs included Ridley Scott's *Legend* and the Bond film *A View to a Kill*. Gibbs gained experience in the disciplines of set dressing and standing by on set, then went freelance in 1985 with Julien Temple's *Absolute Beginners*. Three years later, he had the first offer of a prop master position on Roald Dahl's *Danny, the Champion of the World*. At that time, he split his efforts between feature films and commercials. This continued until 1993, when Gibbs went to Ireland for *Circle of Friends* with Production Designer Jim Clay. Since then, he has worked on *Captain Correlli's Mandolin*, *About a Boy*, *Love Actually*, *Timeline*, *The Golden Compass*, *Quantum of Solace*, and *Inception*, among others. Gibbs' avid interest in manufacturing keeps him involved with and running large prop shops with amazing teams of technicians. He was given the opportunity to work for Marvel on *Captain America: The First Avenger*, *Thor: The Dark World*, *Guardians of the Galaxy*, and *Marvel's Avengers: Age of Ultron*.

COSTUME DESIGNER ALEXANDRA BYRNE trained as an architect at Bristol University before studying Theatre Design on the Motley Course at the English National Opera under the legendary Margaret Harris. She has worked extensively in television and theater, both as a set and costume designer. Her television credits include Roger Michell's *Persuasion*, for which she received the BAFTA Award for Best Costume Design, and *The Buddha of Suburbia*, for which she received a BAFTA nomination and RTS award. In theater, Byrne received a Tony nomination for Best Set Design for *Some Americans Abroad*, which transferred from the Royal Shakespeare Company to Lincoln Center in New York. Following her work in theater, Byrne designed the costumes for Kenneth Branagh's *Hamlet*, for which she gained her first Oscar nomination. Other credits include *The Phantom of the Opera*, *Sleuth*, and *The Garden of Eden*. She received two further Oscar nominations for her costumes in *Elizabeth: The Golden Age* and *Finding Neverland*. *Elizabeth* finally won her the Oscar. Byrne worked with Kenneth Branagh again on *Thor*, her first production with Marvel, and won the Saturn Award. She then worked with Joss Whedon on *Marvel's The Avengers*. After designing costumes for Warner Brother's *300: Rise of an Empire*, Byrne returned to Marvel for James Gunn's *Guardians of the Galaxy* and Joss Whedon's *Marvel's Avengers: Age of Ultron*. Byrne is married to the actor Simon Shepherd, and they have four children.

COSTUME DESIGNER JUDIANNA MAKOVSKY is a three-time Academy Award® nominee for her work on the films *Seabiscuit*, *Pleasantville*, and *Harry Potter and the Sorcerer's Stone*, for which she was also nominated for a BAFTA award. Makovsky has had a long and distinguished career, lending her outstanding costume design work to over 30 films, which include: *Guardians of the Galaxy Vol. 2*, *Captain America: Civil War*, *Captain America: The Winter Soldier*, *Earth to Echo*, *The Hunger Games*, *Trespass*, *The Last Airbender*, *National Treasure: Book of Secrets*, *Mr. Brooks*, *X-Men: The Last Stand*, *National Treasure*, *The Legend of Bagger Vance*, *For Love of the Game*, *Gloria*, *Practical Magic*, *Great Expectations*, *The Devil's Advocate*, *Lolita*, *White Squall*, *The Specialist*, *The Ref*, *Six Degrees of Separation*, *Reversal of Fortune*, *Lost Angels*, and *Big*. Makovsky is currently serving as costume designer on the untitled fourth installment of the Avengers franchise.

PROPERTY MASTER RUSSELL BOBBITT's résumé includes all three of Marvel's *Iron Man* films, *Thor*, and *Captain America: The Winter Soldier*, as well as *Oz: The Great and Powerful*, *The Hangover*, *The Hangover Part II*, and J.J. Abrams' *Star Trek*. Tasked with the design, manufacturing, and acquisition of film props, as well as the establishment of prop continuity from scene to scene, Bobbitt has been developing the physical reality of iconic movies for 30 years. He has twice won Hamilton's prestigious "Behind the Camera" Award for Best Property Master. He has also won two Telly Awards for directing. He resides in Los Angeles with his wife, Tracy, and daughter, Jordan.

ARTIST CREDITS

Nick Ainsworth
Richard Anderson
Silvia Bartoli
Mauro Borrelli
Wesley Burt
Andrew Campbell
Roberto Fernández Castro
Pablo Carpio
Jim Carson
Paul Catling
Bob Cheshire
Emma Clough
Christian Cordella
Tim Croshaw
Nick Cross
Adam Del Re
Julian Dehoff-Bourne

Double Negative
Jack Dudman
Gerard Dunleavy
John Eaves
Jann Engel
Jools Faiers
Anthony Francisco
Rodney Fuentebella
Sarah Ginn
Oliver Goodier
Adi Granov
Sean Hargreaves
Rick Heinrichs
Josh Herman
Tim Hill
Chrissy Howes
Rhys Ifan

Kevin Jenkins
Ian Joyner
Steve Jung
Chris Kessler
Jason Knox-Johnston
Tani Kunitake
Fabian Lacey
Alexander Mandradjiev
Jerad Marantz
Ryan Meinerding
Method Studios
Moving Pictures Co.
Josh Nizzi
Karla Ortiz
Andy Park
Alan Payne
Julien Pougnier

Production Stills and Props
Jamie Rama
Chris Rosewarne
Adam Ross
Phil Saunders
Stephen Schirle
Constantine Sekeris
Daniel Simon
John Staub
Tully Summers
Mark Swain
Justin Sweet
Jackson Sze
Pete Thompson
Dan Walker
Charlie Wen
Luke Whitelock